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# EXECUTIVE SUMMARY

The Bragg Boulevard Corridor Plan presents a concept for the transformation of Bragg Boulevard into a multimodal corridor that strengthens mobility, accessibility, and prosperity for the region. Key objectives of the plan include:

- Present a multimodal transportation plan to enhance how travel by transit, bicycling, and walking supports the community and military base
- Identify mobility options along Bragg Boulevard between Fort Bragg and downtown Fayetteville
- Illustrate how new urban development and redevelopment in the corridor can facilitate travel by bus, bike, and foot

Based on these purpose statements, a new vision for transportation services and associated land use development has been crafted for the Bragg Boulevard corridor between Hay Street in downtown Fayetteville and I-295 near the Fort Bragg entrance. This process was led by the City of Fayetteville and the Fort Bragg Regional Alliance, and the project consultant team of Planning Communities, Parsons Brinckerhoff, and DHM Design. The plan was guided by a Steering Committee of government agencies, military, private businesses, educational institutions, and other organizations and Fayetteville residents.

A variety of approaches were used to analyze corridor resources and obtain stakeholder and community input. Following a field review and analysis of existing land use, economic, community, and transportation characteristics, key stakeholder interviews were conducted to better understand local and regional influences and to gain a market perspective within the corridor. The cornerstone of the outreach effort was a multi-day charrette, where stakeholders and community members reviewed corridor elements and participated in interactive focus group sessions. During this charrette, Steering Committee members and stakeholders were engaged in a facilitated exercise to define the following goals for the corridor:

- Promote multimodal transportation choices, including travel by bus, bike, and foot
- Improve mobility while offering more efficient access to corridor destinations
- Improve the safety and visual character of Bragg Boulevard
- Create vibrant mixed-use places where people want to live, work, and play
- Improve the form and appearance of existing developed properties
- Use green space to enhance the look, feel, and function of Bragg Boulevard
- Implement well-designed and well-placed signage to transform Bragg Boulevard into an aesthetically pleasing corridor
- Develop collaborative partnerships to implement a shared vision for redevelopment

Based on these goals and on feedback from businesses, residents, and other interested parties, three alternative scenario concepts were developed and refined during the charrette:

- Existing Trends
- Strategic Highway Corridor

- Activity Center/Multimodal

An overview of each concept is provided in the sections that follow.

### Alternative Concept #1: Existing Trends

Under this concept, Bragg Boulevard serves as a primarily local-serving thoroughfare providing unlimited access points to properties, with adjacent businesses almost exclusively dependent upon the automobile. This alternative is characterized by the following conditions:

- Significant curb cuts with continued vehicle/pedestrian conflict
- Limited multimodal infrastructure potential
- Bragg Boulevard is a physical barrier between land uses and neighborhoods within corridor
- Residential and commercial densities unlikely to support enhanced transit system
- Corridor uses continue to primarily cater to Fort Bragg rather than balancing with surrounding neighborhoods

Certain aspects of the current development and transportation pattern along Bragg Boulevard are positive, including the sufficiency of retail services, street network connectivity, and overall traffic mobility. However, it has been determined based on community and stakeholder input that Bragg Boulevard is in need of improvement associated with the above conditions. The strategy of allowing Bragg Boulevard to continue to develop as it has been over the past few decades—with strip commercial development, limited access management, land uses catering primarily to a specific demographic, vehicular-dominated travel, and continued deterioration of public infrastructure and private investment—has not been accepted as a recommended alternative.

### Alternative Concept #2: Strategic Highway

The Strategic Highway alternative concept is focused on moving traffic as efficiently as possible along Bragg Boulevard. This alternative is consistent with the North Carolina Department of Transportation’s (NCDOT) classification for Bragg Boulevard as a high-speed expressway. The Strategic Highway concept would likely require grade-separated interchanges at current intersections and service roads for adjacent development. General characteristics of a Strategic Highway corridor expressway designation include the following:

- |  |  |
|--|--|
| • Emphasis on mobility/reduction of travel time                  | • At-grade intersections for minor cross streets |
| • Less emphasis on accessibility                                 | • No traffic signals                             |
| • High-speed operation   | • No pedestrian or bicycle travel                |
| • Minimum four lanes with median                                 | • Limited/no driveway access                     |
| • Access at grade-separated interchanges for major cross streets |  |

This Corridor Plan recommends that the Strategic Highway alternative concept be eliminated or that the corridor be reclassified from an expressway to a Boulevard or thoroughfare strategic highway, which allows additional access to the roadway. Many characteristics of Boulevard- and thoroughfare-style strategic highway corridors are similar to how Bragg Boulevard functions today. For these reasons, a combination of the two—with the Boulevard concept along most segments—is recommended.

**Alternative Concept #3: Activity Center and Multimodal**

The Activity Center and Multimodal alternative concept for Bragg Boulevard was defined based on Steering Committee, stakeholder, and community input/feedback. The overall land use recommendations for this concept reflect an organization around activity centers/transit hubs that are tied to a public transit option designated specifically for the Bragg Boulevard corridor. Eight activity centers are recommended along the corridor, with an average spacing of 0.75 mile. These centers are in locations where development momentum is already starting to take place or where past history indicates that the location resonates with the community as a hub of activity for future development.

Additionally, many greenway and bike lane links have been proposed throughout the corridor study area to create a layered, community-based multimodal system. An optional bus route connection has been recommended from stop 9 toward the military base on Santa Fe Drive and into the Yadkin Gate, where Fort Bragg has discussed the creation of a bus turnaround. A new “cross-town” bus route is also recommended to connect the Murchison Road area to the Cross Creek Mall area, providing a preferred link between residential areas and shopping amenities.

Based on an analysis of existing land use and transportation conditions, input from corridor stakeholders and community members, and a detailed evaluation of potential solutions, it has been determined that the recommendations proposed as part of the Activity Center and Multimodal concept should be implemented along the Bragg Boulevard corridor. This concept could work in conjunction with a Boulevard/thoroughfare strategic highway designation.

Phasing strategies associated with the land use, transportation, and transit recommendations are identified in this Corridor Plan, as are various implementation strategies to obtain funding for achieving the vision in an incremental fashion. The recommendations made as part of the Activity Center and Multimodal concept respond to the corridor goals, creating an implementable framework for the community- and stakeholder-based vision developed during the charrette.

# 1.0 INTRODUCTION

Bragg Boulevard is part of a network of major and minor streets connecting the heart of the Fayetteville region—downtown Fayetteville—with Fort Bragg U.S. Army Base, the region’s major employment and economic driver. The corridor provides a fast, convenient connection by private vehicle for the seven-mile trip between downtown Fayetteville and the Knox Access Control Point (ACP) at the southeastern perimeter of Fort Bragg. Currently, transit options between these two key destinations are limited, accommodations for bicycle travel are not present, and pedestrian travel is difficult due to numerous gaps in the sidewalk network. The Bragg Boulevard Corridor Plan outlines recommendations and strategies for creating a vibrant, multimodal corridor.

## Corridor History: Overview

Fort Bragg became a permanent Army post in 1922 and base structures were constructed soon thereafter, including four barracks that still stand today. A 1922 map of Cumberland County shows a sparse street network between the newly established base and downtown Fayetteville. Although Bragg Boulevard did not exist at the time, a road labeled Fort Bragg Road connected Fort Bragg with downtown in 1922. It followed along the present-day alignment for Fort Bragg Road between the Five Points neighborhood and Sycamore Dairy Road and continued north from Sycamore Dairy Road along the same alignment now occupied by Bragg Boulevard. State highway historical maps indicate that Bragg Boulevard was built in the late 1930s and early 1940s.

As a major employer and economic driver, Fort Bragg has played a substantial role in the growth of the Fayetteville region. The population of Fort Bragg at the dawn of World War II was 5,400, increasing rapidly to a peak of 159,000 during the war years. Following the war, other key destinations now served by Bragg Boulevard began to emerge. Fayetteville High School (later renamed Terry Sanford High School) was built on Fort Bragg Road in the early 1950s. Further north along Fort Bragg Road, Fayetteville Technical Community College opened in 1961. This institution is now the fourth largest community college in North Carolina, with a student population of 10,000 and the largest continuing education program in the state.

The region has experienced significant growth in recent years due in large part to Fort Bragg, which realized a sizeable increase in operations in 2003 following the invasions of Iraq and Afghanistan. In accordance with the recommendations of the 2005 Base Realignment and Closure Commission (BRAC), the base at Fort McPherson, Georgia closed and the U.S. Army Forces Command and U.S. Army Reserve Command relocated to Fort Bragg. A new Command Headquarters facility was completed at Fort Bragg in June 2011. On March 1, 2011, the former Pope Air Force Base was absorbed into Fort Bragg.

In July 2008, the City of Fayetteville annexed Fort Bragg, adding nearly 40,000 residents to the City. This annexation reflects the strong influence of the military base on regional growth and sets the stage for an improved transportation system between Fort Bragg and the heart of the City of Fayetteville.

Figure 1-1: 1922 Street Network



Figure 1-2: Historical Map



## Project Purpose

The Bragg Boulevard Corridor Plan presents a concept for the transformation of Bragg Boulevard into a multimodal corridor that strengthens mobility, accessibility, and prosperity for the region. Key objectives of the plan include:

- Present a multimodal transportation plan to enhance how travel by transit, bicycling, and walking supports the community and military base
- Identify mobility options along Bragg Boulevard between Fort Bragg and downtown Fayetteville
- Illustrate how new urban development and redevelopment in the corridor can facilitate travel by bus, bike, and foot

In addressing these objectives, the Bragg Boulevard Corridor Plan provides key recommendations that will guide future development and redevelopment in support of an enhanced vision for the corridor.

## Study Area

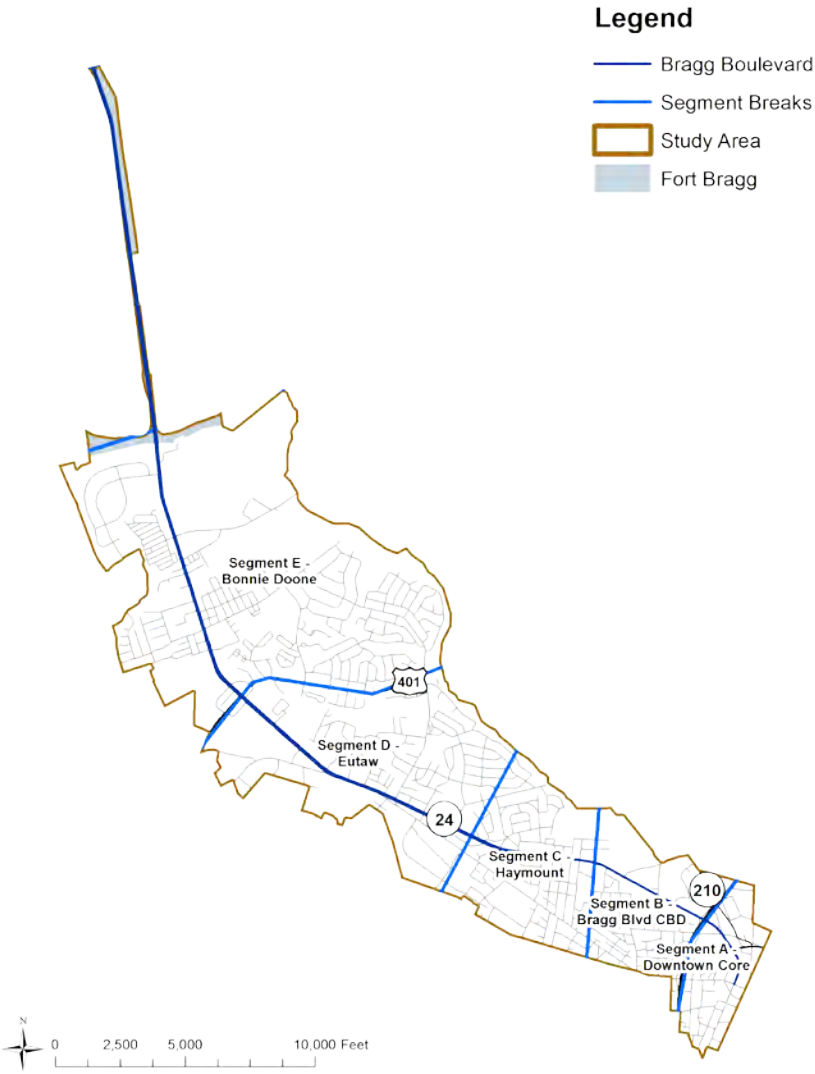
The study area for the Bragg Boulevard Corridor Redevelopment Plan is shown in Figure 1-3. The boundaries generally define the area in which land use decisions would influence corridor development, as well as to capture key community features and corridor users.

The study area extends from downtown Fayetteville in the east to Fort Bragg in the west, covering 9.2 miles of Bragg Boulevard. The eastern limit of the study area is Winslow Street downtown and the western limit is the intersection of Bragg Boulevard with Randolph Street on Fort Bragg. With the exception of the segment within Fort Bragg, for which the study boundary encompasses only the roadway itself, the study area extends outward from Bragg Boulevard as appropriate to capture major land uses, roadway users, and community features. Much of the study area is located within a Watershed Water Supply Area, where regulations limit the amount of impervious surface to 70 percent.

Due to the length of the corridor and the diversity of resources and characteristics along its extent, Bragg Boulevard has been divided into six segments for analysis. These segments include:

- **Downtown Core** (Segment A), between Hay Street and US 401.
- **Bragg Boulevard CBD** (Segment B), between US 401 and Westmont Drive.
- **Haymount** (Segment C), between Westmont Drive and Barrington Cross Street.
- **Eutaw** (Segment D), between Barrington Cross Street and Pamalee Drive.
- **Bonnie Doone** (Segment E), extending from Pamalee Drive to the southeastern perimeter of Fort Bragg, just south of the

Figure 1-3: Study Area



Knox Access Control Point (ACP).

- **Fort Bragg** (Segment F), the portion of the corridor that is within Fort Bragg. In this segment, the study area is limited to the corridor itself in that all land use decisions within the base are made by the U.S. Military.

Land use, economic, community, and transportation resources for these study area segments are discussed in Sections 3.0 and 4.0.

## 2.0 PLAN DEVELOPMENT PROCESS

### Planning Partners

The Bragg Boulevard Corridor Plan effort has been led by the City of Fayetteville and the Fort Bragg Regional Alliance (FBRA). FBRA is a partnership of governments surrounding Fort Bragg that coordinates planning and identifies community needs and impacts as the U.S. Forces Command and the U.S. Army Reserve Command relocate to Fort Bragg. FBRA secured funding from the U.S. Department of Defense Office of Economic Adjustment to prepare this plan. The City of Fayetteville, Cumberland County, Fayetteville Area Metropolitan Planning Organization, and the Fort Bragg Regional Alliance have identified this project as a high priority and have been involved in the plan development process.

### Steering Committee

The Steering Committee for the Bragg Boulevard Corridor Plan was comprised of professionals working for government agencies, private businesses, educational institutions, and other organizations directly involved in the future development of Bragg Boulevard. This group played a technical advisory role throughout the project with key responsibilities including the following:

- Provide insight on the context, needs, and unique characteristics of the project and study area
- Offer technical guidance on plan elements
- Help to define a vision and associated goals for the corridor
- Support development of alternative concepts and scenarios to achieve this vision
- Review and provide feedback on draft concepts and deliverables
- Provide ongoing feedback on the overall direction of the project

In support of these responsibilities, the Steering Committee met three times during the course of the project. Members of the Steering Committee are listed in Table 2-1.

**Table 2-1: Steering Committee**

Name	Organization	Title
<b><i>Agency, Base, and Municipal Representatives</i></b>		
Eloise Sahlstrom (Project Manager)	City of Fayetteville	Urban Designer
John Harbison	Fort Bragg Regional Alliance	Deputy Director
Karen Hilton	City of Fayetteville	Planning & Zoning Manager
Scott Shuford	City of Fayetteville	Development Services Director
Rusty Thompson	City of Fayetteville	Engineering & Infrastructure Interim Director
Randy Hume	City of Fayetteville	Transit Director
Lee Jernigan	City of Fayetteville	Traffic Engineer
Neil Perry	City of Fayetteville	Interim Traffic Engineer
Jami McLaughlin	City of Fayetteville	Downtown Development
Ray Goff	Fort Bragg	Traffic Engineer
Greg Burns, P.E.	NCDOT – Division 6	
<b><i>Businesses and Chambers of Commerce</i></b>		
Todd Lyden	Fayetteville-Cumberland County Chamber of Commerce	Business Development Manager
<b><i>Developers</i></b>		
Rajan Shamdasani	American Uniform Sales	President
Don Broadwell	Broadwell Land Co.	President
Butch Dunlap	C&S Commercial Properties	Vice President/Broker-in-Charge
<b><i>Universities/Colleges</i></b>		
Emily Dickens	Fayetteville State University	Director of Government & Community Affairs



Key Stakeholders

A variety of groups and organizations were involved in the development of the Bragg Boulevard Corridor Plan. Key stakeholder types include the following:

- Local elected and appointed officials
- Military base personnel
- Transit providers
- Transportation and other agency representatives
- Area business owners
- Residents
- Developers
- Frequent corridor users
- Advocacy groups

These stakeholders were engaged through interviews and participation in the Charrette. Input from key stakeholders informed the development of concepts for Bragg Boulevard.

Project Schedule

The Bragg Boulevard Corridor Plan was initiated on May 1, 2012. The project team began by preparing two preliminary reports: Land Use, Economic, and Community Characteristics and Access and Transportation. As shown in Figure 2-1, a multi-day Charrette was held on June 11-13, 2012, in Fayetteville. This event served to collect feedback on corridor characteristics and opportunities for improvement. The project team used input from the preliminary reports and the Charrette to prepare the final Corridor Plan, delivered in late July 2012.

Field Review

To more fully understand corridor challenges and opportunities and to support the development of the preliminary reports, an initial field visit was conducted in early May 2012. During this visit, corridor features such as businesses, neighborhoods, parks, community centers, transportation infrastructure, and other resources were identified. All findings were documented using photographs and field notes; the corridor photo log is located in the Appendix of this report. In addition to providing an inventory of features, the initial field visit also guided the definition of the study area based on corridor characteristics.

Planning Process

The conceptual process used to develop the Bragg Boulevard Corridor Plan is shown in Figure 2-1. Following an inventory of existing conditions and related planning initiatives, the project team met with the Steering Committee and key stakeholders to define the vision, goals, and measures of success for the corridor. The resulting goal statements were used to envision a variety of concepts for how the Bragg Boulevard corridor might grow and develop over time.

Figure 2-1: Project Schedule and Milestones





These concepts were presented to stakeholders and members of the community for review and comment. Based on the feedback received, the concepts were further refined and moved forward into specific alternatives. The project team then reviewed each of the alternative concepts in turn to evaluate their feasibility and appropriateness in light of the goal statements defined by stakeholders. Finally, the project team used the results of this analysis to identify a recommended concept to move forward. The alternative concepts developed through this process are presented in Chapter 6, while Chapter 7 provides implementation strategies to move this recommended concept forward.

### **Community Engagement Overview**

The project team used a variety of engagement techniques throughout the development of the Bragg Boulevard Corridor Plan. In order to reach and include as many stakeholders as possible, the project team actively promoted the plan, advertised opportunities to share input including a multi-day Charrette, and solicited ideas and feedback from a variety of community leaders, government representatives, business leaders, educational institutions, members of the public, and other key local stakeholders. The project team worked closely with project leads at the City of Fayetteville and the Fort Bragg Regional Alliance throughout the process. A more detailed description of the community engagement process is provided in Chapter 5.

### **Analysis and Documentation**

As described above, the project team conducted an analysis of each alternative concept developed through Steering Committee, stakeholder, and public input. This analysis involved evaluating the financial feasibility of each alternative as well as its appropriateness in light of the goal statements developed during the visioning process. All concepts and analysis results are documented in Chapter 6 of this plan, and specific implementation recommendations for the recommended concept are documented in Chapter 7.

3.0 EXISTING LAND USE, ECONOMIC, AND COMMUNITY CONDITIONS

In an effort to define existing conditions along the Bragg Boulevard corridor study area, physical, economic, and social resources have been identified and are described in this section. Land use and development patterns are analyzed, as well as demographic and employment trends. Regional and corridor economic characteristics are reviewed and an inventory of community, cultural, and natural resources is presented.

Overall Corridor Profile

The following sections describe existing conditions related to land use, development, demographics, economic characteristics, natural and physical resources, and community and cultural resources for the study area as a whole. Following this overall portrait, similar descriptions are offered for each of the six study area segments.

Land Use

The Bragg Boulevard corridor land use transitions from a mix of commercial uses to residential to retail and then back to a mix of commercial moving from the south end of the corridor at Hay Street in downtown Fayetteville to the north at the under construction interchange with I-295. The variation in land uses corresponds to varying cross sections along the roadway, some of which provide virtually unlimited access to Bragg Boulevard.

Table 3-1: Developed & Undeveloped Land – Study Area

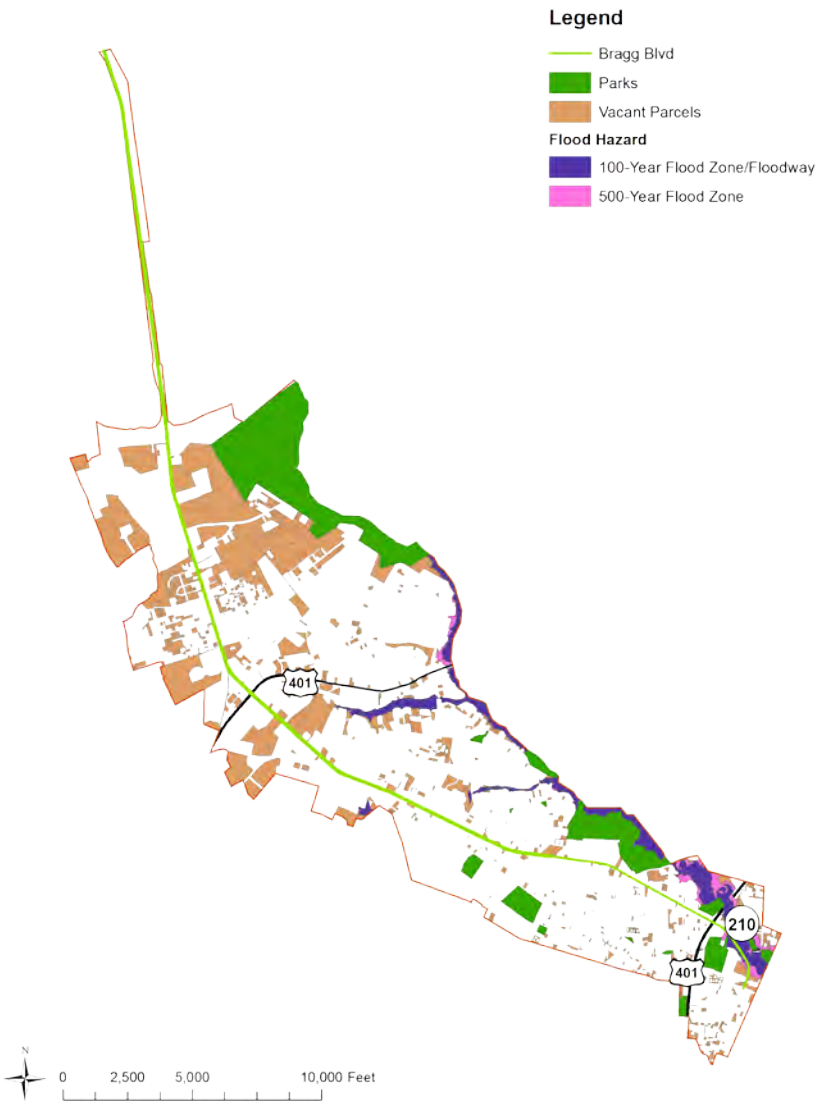
Type	Acres	% Of Total
Vacant*	1,098.5	22.7%
Parks/Open Space	527.1	10.9%
Improved	3,207.9	66.4%
Total	4,833.5	100.0%

Source: Cumberland County  
\*Includes floodplain areas.

Residential neighborhoods along the corridor are stable, and support many of the local businesses that front Bragg Boulevard. Retail establishments appear to be doing well, with limited vacancies and active patronage. The high volume of traffic along Bragg Boulevard is beneficial for existing neighborhood businesses that rely on convenience as opposed to destination shopping.

With respect to the study area, which encompasses all of the commercial areas along the corridor as well as the adjacent neighborhoods with direct access to Bragg Boulevard, approximately two-thirds of its nearly 5,000 acres includes an improvement in the form of a building or other man-made structure (see Table 3-1). According to Cumberland County’s latest GIS data, this leaves one-third of the study

Figure 3-1: Vacant Parcels and Undeveloped Land



area acreage either vacant or occupied by parks/open space. Although classified as vacant, a portion of this category’s acreage is undevelopable as it is within the floodplain of Little Cross Creek in the northeastern portion of the study area between

Skibo Road/Pamalee Drive and I-295 (see Figure 3-1). Land designated as parks/open space amounts to 527.1 acres, or almost 11% of study area acreage. This total includes a large, 475-acre parcel owned by the City of Fayetteville that has been identified as a potential passive park.

Table 3-2 shows the land use distribution of the 4,833.5 acres in the study area. Based on data obtained from the Cumberland County GIS department, almost 30 percent of developed land within the study area is single-family detached residential. Total residential uses, including single-family, apartments, townhouses, duplex/triplex/quadrplex, condominiums, and manufactured/mobile homes, encompass about 1,900 residential acres, or nearly 60 percent of the 3,200 developed acres in the study area.

Among non-residential land within the study area, retail uses occupy 579.1 acres, followed by institutional land, which includes Fayetteville Technical Community College, with 384.9 acres. Other non-residential uses, excluding parks/open space, comprise less than 7 percent of the land area. More than half of the remaining non-residential land, or 3.8 percent, is in use for utilities and includes land owned by the City of Fayetteville Public Works Commission.

### Zoning

In July 2011, zoning districts in Fayetteville were reclassified, consolidating many of the residential and commercial districts, as well as introducing more planned development and overlay districts to support urban design goals. These changes allow for more flexibility with respect to the variation in permitted uses within each zone.

Consistent with existing land use, more than 60 percent of the study area is currently zoned for single-family residential uses as shown in Table 3-3. Most of the single-family residential is located within older, established neighborhoods ranging from 0.14 to 0.24 acre lots. There are also 460.8 acres, approximately 10 percent of the study area, zoned for Mixed Residential allowing for higher density residential within transitional areas between commercial and lower density residential. Planned Neighborhood Development districts comprise the remaining 233 acres of residential zoning and comprise approximately 5 percent of the study area.

**Table 3-2: Existing Land Use**

Land Use	Acres	% Of Total
Single Family Detached	1,433.7	29.7%
Vacant	1,098.5	22.7%
Retail	579.1	12.0%
Institutional	384.9	8.0%
Apartments	192.3	4.0%
Utilities	182.1	3.8%
Manufactured/Mobile Homes	132.4	2.7%
Office	67.0	1.4%
Duplex, Triplex, Quadraplex	65.4	1.4%
Industrial	60.0	1.2%
Condominiums	48.9	1.0%
Townhouses	35.1	0.7%
Hotel	20.4	0.4%
Parks/Open Space	527.1	10.9%
Unknown	6.6	0.1%
<b>Total</b>	<b>4,833.5</b>	<b>100.0%</b>

Source: Cumberland County

**Table 3-3: Existing Zoning – Study Area**

Zoning Category	Acres	% of Total
Single-Family Residential – up to 10,000 sq. ft. lots	1755.7	36.3%
Single-Family Residential – up to 6,000 sq. ft. lots	1,165.9	24.1%
Community Commercial – Retail, Services, and Office	878.2	18.2%
Mixed Residential – up to 5,000 sq. ft. lots	460.8	9.5%
Heavy Industrial – Manufacturing, Processing, and Distribution	245.9	5.1%
Planned Neighborhood Development	233.1	4.8%
Office and Institutional	78.0	1.6%
Downtown – Mixed-Use Urban Center	12.7	0.3%
Unknown	3.23	0.1%
<b>Total</b>	<b>4,833.5</b>	<b>100.0%</b>

Source: Cumberland County

Commercial uses along Bragg Boulevard are primarily located within the Community Commercial Zoning District (CCZD). A mix of various commercial uses is allowed in CCZD. This district consists of 878.2 acres, or 18 percent of the study area total, and primarily includes retail uses such as shopping centers and convenience stores, but also accommodates professional services and population-serving office uses such as real estate, law, and doctor offices. Approximately 245.9 acres are zoned for Heavy Industrial, which allows for primarily manufacturing uses. This zoning category, however, seems inconsistent with the amount of land actually being used for industrial purposes, which amounts to only 60 developed acres. Much of the Heavy Industrial zoned acreage is being used for commercial purposes, including the Military Business Park. Lastly, office and institutional zoning comprises less than 2 percent of study area land, with the newly created Downtown zoning district occupying the remaining 12.7 acres.

**Coordination with Adopted Plans**

There are a number of adopted plans that are within or influence the Bragg Boulevard study area. These plans range from housing studies to long-range growth plans for the region. The following sections provide a description of these plans, and how they relate to Bragg Boulevard:

Several vacant lots, partially-developed lots, vacant buildings, and partially-vacant buildings exist along the Bragg Boulevard corridor. These conditions are generally dispersed throughout the corridor and include used car lots, pawn shops, and expansive surface parking lots.

**2030 Growth Vision Plan, 2008**

Finalized in 2008, the 2030 Growth Vision Plan sets forth a vision and framework for sustainable growth and development within Fayetteville, Cumberland County, and eight surrounding municipalities. Strategies associated with land use, transportation, parks/recreation, housing, commercial development, and community appearance are included. Major policies recommended as part of the plan include the rehabilitation and reuse of currently unused or underutilized structures, sites, and infrastructure.

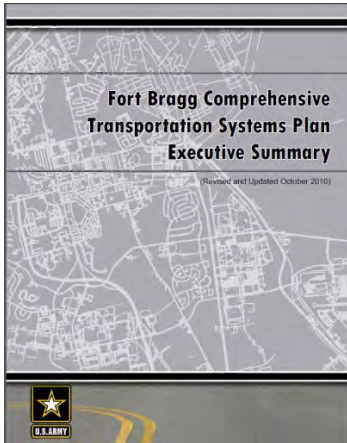
**City of Fayetteville Transit Development Plan, 2009**

The *City of Fayetteville Transit Development Plan* proposes to expand upon the City’s public transit system (Fayetteville Area System of Transit – FAST), organizing its recommendations within three, five, and ten-year horizons. The plan includes a detailed route analysis, which evaluates improvements and/or extensions of service within the City. Additional discussion of existing and planned transit is provided in Chapter 4.

**Zoning Classifications  
In the Study Area:**

- DT – Downtown
- CC – Community Commercial
- LC – Limited Commercial
- NC – Neighborhood Commercial
- LI – Light Industrial
- HI – Heavy Industrial
- OI – Office and Institutional
- MR-5 – Mixed Residential 5
- SF-6 – Single Family Residential 6
- SF-10 – Single Family Residential 10
- SF-15 – Single Family Residential 15
- Mobile Home

Bragg Boulevard bus routes serving limited portions of Bragg Boulevard were included in the analysis, which include Routes 6, 12, and 14. There is a broad recommendation included in this report to create new bus routes that serve entire corridors; however there were no specific street names identified.



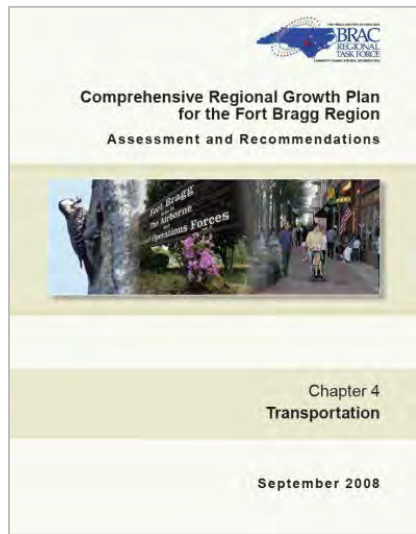
**Fort Bragg Comprehensive Transportation System Plan, 2010**

The *Fort Bragg Comprehensive Transportation System Plan*, developed in 2010, discusses the transportation context within and surrounding the Fort Bragg installation, defining goals and objectives to address traffic congestion, support multimodal transportation options, and identifying needed infrastructure projects. This plan was divided into three different components:

- **Thoroughfare Plan** – Provides assessment of existing Fort Bragg roadway network, projected traffic impacts, and recommended improvements to thoroughfares, roads and streets, critical intersections, and ACPs.
- **Alternative Transportation Study** – Promotes integrated and implementable concepts for long-range sustainable multimodal transportation alternatives at Fort Bragg.
- **Transportation Capital Improvements Projects** – Details 200 recommended near- and long-term roadway segment, intersection, and ACP projects with rough order magnitude cost estimates for capital planning and budgeting purposes.

All of these initiatives would affect the transportation network and land use development patterns for the northern section of Bragg Boulevard (north of Shaw Road).

Further discussion of planned transportation improvements is provided in Chapter 4.



**Comprehensive Regional Growth Plan for the Fort Bragg Region, 2008**

The *Comprehensive Regional Growth Plan for the Fort Bragg Region*, completed in 2008, describes past and potential Fort Bragg growth impacts upon the region associated with the economy, housing, transportation, public safety, and public infrastructure among other topics. Chapter 10 of this plan is titled “Land Use Planning” and focuses on documenting current conditions, assessing land use patterns, and identifying gaps and future needs. Needs identified include land use consistency between Fort Bragg and surrounding properties, including a suitability analysis.

In addition, the concept of a center-corridor-wedge approach to land use planning surrounding Fort Bragg was identified in the Regional Growth Plan. This concept recommends that commercial nodes or centers that include a mix of development types be created in high activity areas, integrating a diverse housing stock and supporting multimodal transportation. These centers are commonly located where the highest densities of population and built infrastructure are congregated, such as towns, cities, and at the intersections of major roadways. Corridors in the plan generally follow transportation arterials (rail or highways) that emanate from identified centers. Wedges refer to the expanses of land between corridors, where population densities decrease as a function of distance from the center.

There are multiple centers within the seven-county Fort Bragg Region, the closest of which to Bragg Boulevard are Fayetteville, Fort Bragg/Spring Lake, and Hope Mills. The concept is to focus the most intense growth and supporting infrastructure within the region in the centers, connect the centers with efficient transportation corridors, and preserve agricultural and environmental resources within the wedges.

Findings and recommendations within this study will be integrated into those that are developed for the Bragg Boulevard Corridor Study as they not only relate to the potential for increased and improved residential development for Fort Bragg personnel and Fayetteville residents, but also the potential for transit-focused clusters centered around a diverse housing mix.

### ***Regional Housing Market Study, 2011***

The *Regional Housing Market Study* was initiated by the Base Realignment and Closure Commission (BRAC) Regional Task Force (now named the Fort Bragg Regional Alliance), and focused on a supply and demand analysis of the housing market within the region serving Fort Bragg. Elements included:

- Assessment of walkable residential communities
- In-fill and downtown housing options
- Housing choice
- Variability in the rental market
- The importance of a regional view



### ***Fort Bragg Regional Sustainable Growth Management Strategy, 2011***

The *Fort Bragg Regional Sustainable Growth Management Strategy* was also initiated by the BRAC Regional Task Force (now the Fort Bragg Regional Alliance), with its main mission to “define a strategy that encourages economic development, balances anticipated growth with the region’s desire to preserve important natural and cultural resources, and advances mission operability.” The importance of this study as it relates to the Bragg Boulevard Corridor study is that it provides a wealth of land use information not only on Fort Bragg, but also the region surrounding it. It also details the potential for future retail development within the region based on projected population and household growth.

The industrial and commercial market supply base is also evaluated and it includes a discussion of the demand for space by use type as well as the potential for future development based on employment projected growth. Data is aggregated either by county, city, or town.

The Fort Bragg Regional Sustainable Growth Management Study provides context to the potential for these types of uses along Bragg Boulevard, and specific areas where future development may occur. Commercial employment forecasts by Traffic Analysis Zone (TAZ) are detailed in the Future Conditions section of this report.



## Development Patterns

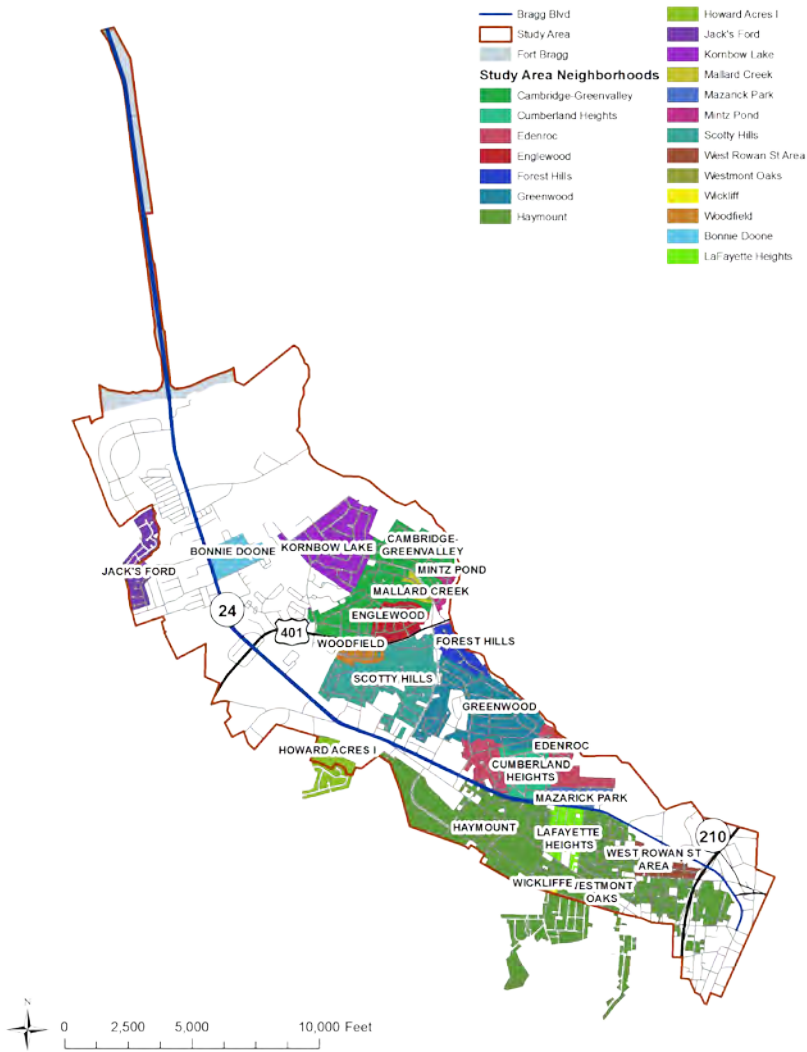
The following sections describe the characteristics of residential and commercial development within the study area, focusing on amounts, types, and locations of activity.

### *Residential Areas – Neighborhoods and Subdivisions*

Residential neighborhoods behind the commercial uses that front Bragg Boulevard provide support for corridor businesses. These neighborhoods are stable and well maintained. The following is a list of neighborhoods within the study area as defined by the City’s GIS database (see Figure 3-2):

- Bonnie Doone (41.1 acres)
- Cambridge-Green Valley Estates (216.5 acres)
- Cumberland Heights (69.1 acres)
- Edenroc (109.4 acres)
- Englewood (56.1 acres)
- Forest Hills (39.1 acres)
- Greenwood (190.5 acres)
- Haymount (674.8 acres)
- Howard Acres (62.3 acres)
- Jack’s Ford (60.8 acres)
- Kornbow Lake (145.4 acres)
- Lafayette Heights (63.4 acres)
- Mallard Creek (11.9 acres)
- Mazarick Park (29.4 acres)
- Mintz Pond (17.9 acres)
- Scotty Hill (188.5 acres)
- West Rowan Street Area (28.2 acres)
- Westmont (3.5 acres)
- Wickliffe (3.9 acres)
- Woodfield (26.4 acres)

**Figure 3-2: Neighborhoods in the Study Area**



**Commercial Areas – Nodes and Activity Centers**

Bragg Boulevard between Hay Street and I-295 is primarily a commercial corridor. More than 650 acres are currently utilized as retail, office, and hotel uses. The section of Bragg Boulevard between Stamper Road and Skibo Road contains the most intense commercial properties along the corridor. Much of the commercial development is located in either strip shopping centers or stand-alone retail buildings. Additionally, some focused areas of retail establishments have developed along the corridor.

The primary commercial node in the study area is located at the intersection of Sycamore Dairy Road and Bragg Boulevard. Uses here include a Food-Lion-anchored shopping center, Bragg Boulevard Flea Market Plaza (former K-Mart), Omni Cinemas 8, and Horne’s Plaza Shopping Center, as well as a mix of various stand-alone retail businesses. In addition to this location, Eutaw Village shopping center, which is located between Elm Street and Stamper Road on the east side of Bragg Boulevard, is an active shopping center with an IGA - Carlie C’s grocery store, as its major anchor.

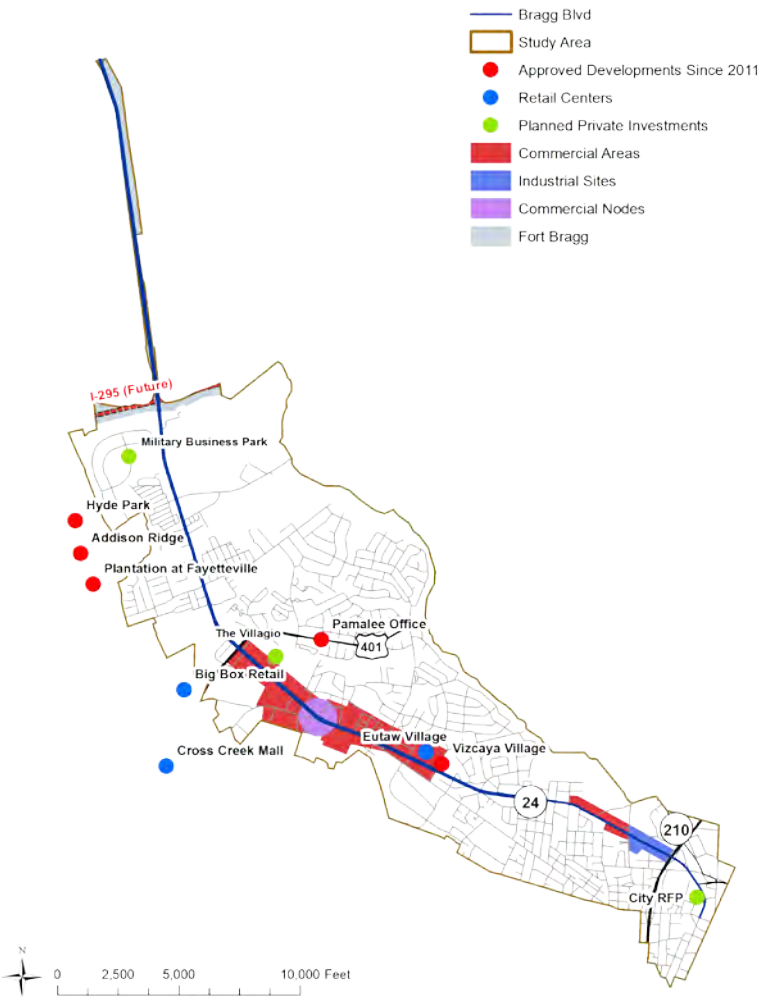
Big-box retail, including a Super Wal-Mart and a Sam’s Club, is located just west of Bragg Boulevard along the north side of Skibo Road. Although the Skibo Road/Bragg Boulevard intersection is not at-grade, this area is a local shopping destination with land available for expansion. Commercial areas are displayed in Figure 3-4.

**Industrial/Office Areas/Sites**

Industrial development along Bragg Boulevard is limited to primarily light industrial and warehouse facilities. Within the study area, industrial facilities are predominantly located on Bragg Boulevard near the central business district of Fayetteville between Rowan Street and Ames Street. However, based on tax records, these have been classified as commercial uses. This segment of Bragg Boulevard is in close proximity to US 401 (Martin Luther King Jr. Freeway), a major north-south connector between downtown Fayetteville and I-95. However, Bragg Boulevard’s proximity to residential areas along the entire corridor, small and variable parcel sizes, and limited access to other major highways make it less attractive for industrial development.

More recently, there has been progress in developing a business park (Military Business Park) adjacent to Fort Bragg in the southwest quadrant of the future I-295 and Bragg Boulevard. This park is planned to contain a mix of office and research-based facilities that support Fort Bragg operations. Upon completion of I-295 and its eventual connection from All-American Freeway to I-95 northeast of Fayetteville, the northern section of Bragg Boulevard, including Military Business Park, should become more attractive for military suppliers and manufacturers. Future uses will primarily be focused on light industrial, flex, and professional office space. Over the long-term, there may be potential for some corporate, Class A office space in the southeast quadrant of the future I-295/Bragg Boulevard interchange as part of a mixed-use commercial center. Current industrial sites are shown in Figure 3-3.

**Figure 3-3: Current Development Patterns**





Compatibility of Adjacent Land Uses and Buffer Types

The commercial portion of the corridor, which mainly includes the parcels that front Bragg Boulevard, is primarily bounded by residential uses to the rear. The transition between these land uses is a combination of natural wooded areas and roadways. In many cases, there are no direct connections between the commercial properties and the housing behind them, requiring the use of vehicles for access.

Vacant Properties/Occupancy Rates

As was noted in the existing land use section of this report, one-third of the land within the study area is undeveloped. However, as it relates to developed land, most of the structures immediately along Bragg Boulevard are occupied. A few vacant buildings are concentrated near the Andy Street/Bragg Boulevard intersection, as well as along Bragg Boulevard in between Pamalee Drive and Zollie Jones Road.

There were just a few notable vacancies in some of the multi-tenant retail buildings between Sycamore Dairy Road and Stamper Road, which is the primary retail portion of the Bragg Boulevard corridor. Horne's Plaza, which houses the Beauty World business at the Sycamore Dairy Road/Bragg Boulevard intersection, had about 10,000 square feet vacant within the 85,000-square-foot center. This space is currently renting for about \$7.00-\$11.00 per square foot. Additional vacant commercial space exists in the 900 block of Bragg Boulevard between US 401 and Ames Street, including a freestanding, 15,000-square-foot building renting for \$6.00 per square foot.

According to the US Census Bureau, housing within the block groups that encompass the study area was 90 percent occupied in 2010.

Typical Parcel/Site and Building Characteristics

According to tax records, parcel frontage along Bragg Boulevard ranges from less than 5 feet to slightly more than 1,000 feet along the vacant 23.5-acre parcel adjacent to the new Villagio apartments. Parcel depth extends up to 1,350 feet at this same property, but primarily ranges from 100 to 500 feet along the corridor.

Structures fronting Bragg Boulevard are primarily one story, single-tenant commercial buildings, with some multi-tenant centers located near the Sycamore Dairy Road intersection. Sizes generally range from 2,000 square feet to 100,000 square feet (Eutaw Village Shopping Center). Most buildings are set back from the roadway with surface parking lots fronting Bragg Boulevard. Based on tax records, many of the buildings were built during the 1940s, with some dating back to the early 1900s and others just recently constructed.

Access to Bragg Boulevard along the majority of the corridor is unlimited with some parcels having up to three driveways. There is, however, some form of a planted or concrete median located along Bragg Boulevard, except for the section between Blue Street and Glenville Road just north of Martin Luther King Jr. Freeway, which includes a center turn lane. The median limits the amount of left-turning movements and reduces traffic congestion in high-volume locations such as Sycamore Dairy Road and Fort Bragg Road. This type of cross section tends to concentrate the most intense development at major intersections that provide full access.

Table 3-4: Residential Building Permits 2004-2011

Year	1 Unit	2 Units	3-4 Units	5 Units or More	Total
2004	2,321	2	3	1,202	3,528
2005	2,935	4	23	1,363	4,325
2006	3,187	2	52	874	4,115
2007	2,083	12	4	565	2,664
2008	1,464	2	0	840	2,306
2009	1,798	22	0	844	2,664
2010	1,610	0	3	1,996	3,609
2011	1,465	2	4	1,336	2,807
Total	16,863	46	89	9,020	26,018

Source: U.S. Census Bureau

Development Trends

This section provides data on development trends within Fayetteville. Information considered in identifying these trends include building/site permits, permitted uses and variance trends, conditional uses/approvals, annexation, and recent or proposed private investment and public infrastructure projects within the study area.

Building/Site Permit Trends

Although building/site permit trends are not aggregated at the study area level, they provide an indication of the market for development and the type of recent activity being proposed along the Bragg Boulevard corridor. Between 2004 and 2011, Fayetteville issued more than 26,000 (average of 3,250 per year) residential building permits within its jurisdiction, as shown in Table 3-3 and Figure 3-4. The majority of the residential permits (65 percent) were for single-family use, with 34 percent for developments of 5 units or more. Between 2005 and 2008, the number of permits issued decreased each year before increasing again between 2008 and 2010. Although single-family permits have been decreasing since 2009, an increase in the number of five-unit plus permits over this same time kept total residential permitting from declining substantially. This trend is consistent with the economic downturn, as single-family residential construction may have been replaced with more affordable apartment and townhouse living.

Current Investment Trends

The following are recent residential and commercial projects that have either been approved or have been submitted to the City of Fayetteville for approval within or adjacent to the study area.

Planned Private Investments

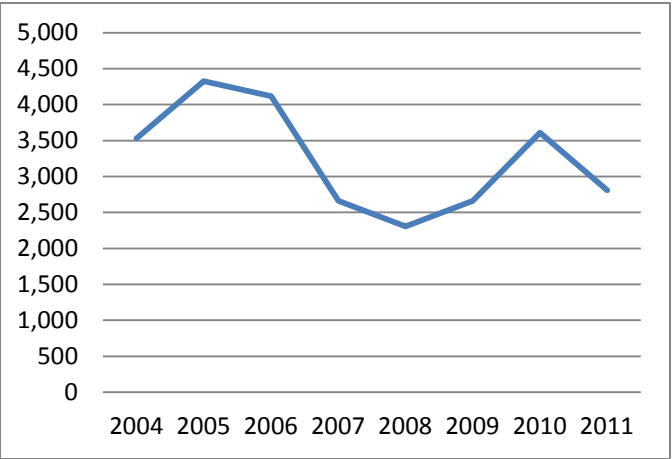


**Military Business Park:** Up to 1.5 million square feet of office space in the southwest quadrant of I-295 and Bragg Boulevard. At build-out, the park could employ 4,500 people. Currently, the only completed building is a 10,000-square-foot laboratory, which is being used to conduct military standard testing for evaluation of radio frequency communications equipment, environmental testing, shock and vibration testing, and evaluation of mobile communications.

**Villagio:** The Villagio is a \$20 million mixed-use project located on the east side of Bragg Boulevard between Sycamore Dairy Road and Pamalee Drive. In 2009, the City and County awarded \$500,000 in over five years’ worth of tax incentives for the Villagio apartment complex. The first phase was completed in 2011. Construction on a second and final phase is expected to begin in the summer of 2012. When completed, the Villagio will have 239 apartments. Early in 2012, the developer proposed a three-story, \$5.3 million office building called The Palazzo.



Figure 3-4: Residential Building Permit Trends 2004-2011



Recent Approvals (2011 – current):

- Small office building approved in January 2011 at Pamalee Drive and Blanton Road
- The 638-unit Addison Ridge apartment community approved in June 2011 at All-American Expressway and Santa Fe Drive
- The 172-lot Hyde Park residential community approved in June 2011 backing up to the Cottonade subdivision at All-American Expressway and Santa Fe Drive
- The Plantation at Fayetteville is a mixed-use community approved in June-October 2011 at All-American Expressway and Santa Fe Drive; first phase includes 240 apartments
- Vizcaya Village is a planned building at 839 Stamper Road approved in March 2012; this building will house an event hall in the former art museum

Anticipated/Current Request for Proposals (RFPs)

Veteran’s Park RFP: The City of Fayetteville has a Request for Proposals currently out for bid on the former Day’s Inn, a 5.5-acre property located along the west side of Bragg Boulevard between Rowan Street and Hay Street. The City is rezoning the property to accommodate a more urban, “downtown” type of development with a mix of uses to include high-density residential, commercial, and potentially institutional uses. The City originally purchased the site with a \$1 million grant from the State to develop Phase II of Veteran’s Park. With the new proposal, the developer of the property would be required to pay \$1 million for the site. A four-story height restriction would be included in the rezoning requirements in an effort to limit visual impacts to the historic district located at the rear of the site.

Planned Public Investments

The following are public infrastructure projects that are either currently underway or planned within or near the study area:

Utility Line Burial and Streetscaping: For the section of Bragg Boulevard between Bargain Street and Pamalee Drive, the City of Fayetteville is currently in the process of improving the streetscape by burying utility lines. The intent of this project is to complement the recent Villagio development and encourage additional private sector investment along the corridor.

Blanton Road Extension: In addition to the utility line burial, the City of Fayetteville is also evaluating the potential to extend Blanton Road from Pamalee Drive to Bragg Boulevard through the Villagio property. This transportation project would provide improved access to available land within the development, which could serve as a catalyst project for well-designed and sustainable growth along Bragg Boulevard.

Streetscaping and Turn-Lane Installation: NCDOT in cooperation with the City of Fayetteville is currently constructing turn lanes along Bragg Boulevard between Johnson Street and Shaw Road. The project also includes planted medians and additional streetscaping to improve the physical appearance of this corridor segment.

In addition to these public infrastructure projects, transportation investments are planned along the Bragg Boulevard corridor and in areas surrounding it. Details on these projects can be found in the Access and Transportation Report.

**Demographic Profile**

Population, demographics, regional and community growth, income and employment, and educational attainment can provide more insight into a community and its transportation infrastructure needs. Population, demographic, and economic data was collected for 31 Census Block Groups within the study area. In some cases, data is not available at the Block Group level and was collected for the Census Tract or higher level. The demographic study area for the corridor is located in Figure B1 (Appendix B).

*Population*

The population in the study area as of the 2010 Census was 35,536, as shown in Table A1 in Appendix A. The study area is more racially and ethnically diverse than the State of North Carolina overall, with 43.3 percent of the population classified as White, non-Hispanic, 46.6 percent as African-American, and the remaining 10.1 percent a variety of other non-white population groups. Beyond the overall diversity of the study area, there are locations within the study area that are even more racially diverse. These include the area along the west side of Bragg Boulevard in the Haymount neighborhood, along the east side of Bragg Boulevard between Barrington Cross Circle and Interstate 295, and along the west side of Bragg Boulevard between Sycamore Dairy Road and Interstate 295. Ethnicity and race in the study area from the 2010 Census is shown in Table A2 of Appendix A. The 2000 data for the Block Groups that make up the study area reflected a similar breakdown of races and ethnicity that are shown in the 2010 data for the City and the County as a whole.

*Transportation Access and Commute Times*

National surveys suggest that 30 percent of the U.S. population does not drive; data for the study area suggest a similar proportion of the study area does not drive. The median age of the study area population is 29.7 years, slightly younger than the median ages for the City of Fayetteville at 29.9 years and Cumberland County at 30.9 years. In the study area, 20 percent of the population is under the age of 15 and thus too young to have a driver’s license. In addition, more than 5 percent of the study area population is age 75 or older. Census data also provide a breakdown of the study area population by the number of vehicles in each household. The data indicate that 13 percent of the study area households do not have a motor vehicle. Assuming there are 2.5 people living in each household (2010 U.S. Census estimate), it is estimated that 13 percent of the study area population – or approximately 4,700 people – do not have access to a motor vehicle on a daily basis.

Furthermore, residents of the City of Fayetteville and Cumberland County generally have shorter commute times than residents in the rest of the state and in the U.S. The share of study area residents with commute times greater than 45 minutes (6.5 percent) is much lower than for the state as a whole (11.8 percent). Table A5 in Appendix A shows travel time to work for the state, county, city, study area and individual block groups.

*Income*

Median household income in the study area as reported by the 2010 American Community Survey (ACS) is \$32,145 annually; lower than that of Cumberland County and the City of Fayetteville at \$43,834 and \$43,284 respectively. The median household incomes of the Census tracts within the study area are shown in Table A3 in Appendix A. Overall, median incomes in the study area are also lower than the statewide average of \$45,570. Table A3 in Appendix A shows median incomes and the distribution of households by income range for the study area, County and State.

The rate of households earning \$50,000 or more per year in the study area is lower in the study area compared to the State, County and City as a whole (34 percent compared to 46 percent, 44 percent, and 42 percent respectively). In addition, the share of households within the study area earning less than \$15,000 per year in the study area is higher than the State, County, and the City, 22 percent compared to 15 percent for the State, County and the City.

Within the study area, 24 percent of the population had an income below the poverty level in 2010, a rate higher than the State, County, and City as a whole at 15 percent for the State and 16 percent for the County and the City. Table A4 in Appendix A shows poverty levels for the State, County, municipalities, study area, and individual block groups from the 2006-2010 ACS.

***Educational Attainment***

Approximately 40 percent of study area residents did not have any education beyond high school as of the 2010 Census. According to the ACS, 14 percent of study area residents attended only some schooling and did not graduate high school; while this rate is similar to that of Cumberland County at 12 percent, it is lower than the State of North Carolina at 16 percent. Similarly, 26 percent of the study area residents completed high school compared to 28 percent of the County and 28 percent of the State. There were comparable rates of higher education in the study area. 16 percent of study area residents completed a Bachelor’s degree compared to 15 percent of the County and 17 percent of the State. Table A6 in Appendix A compares educational attainment within the study area to levels for the County and State.

***Economic Profile***

The following sections describe current economic conditions within Cumberland County and the City of Fayetteville and discussed major employers and employment clusters along Bragg Boulevard and within or in close proximity to the study area. Limited economic data is available specifically for the corridor or study area.

***Employment Trends***

Employment characteristics are also an important indication of the context within which community and social resources operate. Understanding trends in County employment provides the regional perspective needed to evaluate more localized trends within both Fayetteville and the study area.

Annual average employment within Cumberland County increased by 7 percent between 2000 and 2010, as shown in Table 3-5. Approximately 29 percent of the 117,535 jobs in the County in 2010 were in the Educational, Health Care, and Social Assistance sector. This sector had more than twice as much employment as the next leading employment sector, Retail Trade, which employed slightly over 15,000 in 2010. Local, State, and Federal Government employment is distributed throughout each sector. However, calculated separately, all three types of these government jobs combine to total more than 25,000 of the 117,535 jobs in 2010, or about a 22 percent share. More than half of those jobs are in the Federal Government category, reflecting the presence of Fort Bragg. Similar to most of the United States during this ten-year period, the manufacturing sector experienced job losses. In Cumberland County, these losses amounted to 4,694 employees, or a decrease of 39 percent. Other sectors that had notable job loss between 2000 and 2010 include Information, Transportation and Warehousing/Utilities, and Wholesale Trade.

To gain insight into employment within the City of Fayetteville during the past decade, an estimate of City employment by sector in 2010 was obtained from the U.S. Census Bureau and compared to employment by sector within Cumberland County. Table 3-6 indicates that an estimated 59 percent of County employment is located within the Fayetteville city limits. The highest City shares of County employment are within the Information, Other Services, Manufacturing, and Finance, Insurance and Real Estate sectors. The lowest shares are in the Transportation and Warehousing/Utilities, Arts

Entertainment and Recreation, Accommodation and Food Services, and Public Administration sectors. Other than the Unclassified sector, all employment sectors within the City comprised at least half of the County job totals.

According to the Fort Bragg Regional Sustainable Growth Management Strategy report, both the industrial and office markets within Cumberland County have only been absorbing 15,000 square feet annually since 2005. However, the supply is available. Just within the Military Business Park along Bragg Boulevard there is capacity for about 1.5 million square feet of office space.

***Employment Clusters/Major Employers***

Other than Fayetteville Technical Community College centered on Fort Bragg Road between Hull Road and Barrington Cross Street, the study area does not include any centralized areas of employment as most of the commercial development is distributed along Bragg Boulevard in a strip pattern. The most intense retail development along the corridor is between Stamper Road and Skibo Road, with the Skibo Road corridor west of Bragg Boulevard containing big-box regional retail destinations. There are major employment centers in the vicinity of the study area including the termini of the corridor, downtown Fayetteville, and Fort Bragg.

There are numerous auto-related businesses along the corridor, particularly new and used auto dealerships. These uses seem to be more prevalent north of Pamalee Drive, with uses south of Pamalee Drive more oriented toward shopping and restaurants. There are a handful of lodging establishments located along the corridor, primarily clustered along Skibo Road immediately west of Bragg Boulevard and near the Sycamore Dairy Road intersection (Suburban Extended Stay) and Fort Bragg Road intersection (Baymont Inn and Suites).

There are several specific major employers within and surrounding Bragg Boulevard that have influenced development along the corridor in the past, and have the potential to continue to influence future growth and development. Listed below are the major ones, including:

**Table 3-5: Employment by Sector – Cumberland County**

Industry	Annual Average Employment		Change, 00-10	
	2000	2010	#	%
Agriculture, Forestry, Fishing, Hunting & Mining	223	197	-26	-11.7%
Construction	5,402	5,137	-265	-4.9%
Manufacturing	12,165	7,471	-4,694	-38.6%
Wholesale Trade	2,937	2,427	-510	-17.4%
Retail Trade	15,874	15,057	-817	-5.1%
Transportation and Warehousing, Utilities	5,839	4,793	-1,046	-17.9%
Information	2,082	1,481	-601	-28.9%
Finance and Insurance, Real Estate and Rental/Leasing	4,191	4,145	-46	-1.1%
Professional, scientific, and management, and administrative and waste management services	10,267	12,853	2,586	25.2%
Educational, Health Care, and Social Assistance Services	24,177	34,097	9,920	41.0%
Arts Entertainment and Recreation, Accommodation and Food Services	11,816	13,933	2,117	17.9%
Other Services Ex. Public Admin	3,234	3,227	-7	-0.2%
Public Administration	11,799	12,679	880	N/A
Unclassified	0	38	38	N/A
<b>Total</b>	<b>110,006</b>	<b>117,535</b>	<b>7,529</b>	<b>6.8%</b>

Source: North Carolina Employment Security Commission



Fort Bragg: Approximately 56,000 military and 14,000 civilian personnel work at Fort Bragg. The base occupies 161,047 acres, stretching into six counties. The installation currently contains approximately:

- 48 million square feet of building space
- 11 shopping centers
- 28 restaurants
- 1 major medical center
- 12 schools (5,180 students)
- 6,500 homes

In addition to its employment and facilities, Fort Bragg is estimated to contribute approximately \$11 billion annually to the eleven-county area, generating retail sales of about \$2 million for Cumberland County alone. Without Fort Bragg, the county's median annual per capita income would decline from \$29,000 to \$22,000. According to Fort Bragg, it is not likely that the installation will experience additional growth due to downsizing of the U.S. Military.

Fayetteville Technical Community College: With a total enrollment of 10,000 students at its campus located within the study area off Fort Bragg Road west of Bragg Boulevard, Fayetteville Technical Community College is another major employer along the Bragg Boulevard corridor. It is the fourth largest community college in the State of North Carolina, and includes 919 full-time faculty and another 478 instruction, research and public service full-time staff.

Cross Creek Mall: Located at Skibo Road and All American Expressway approximately one mile from Bragg Boulevard and just outside the study area, Cross Creek Mall is not only a major employer in close proximity to Bragg Boulevard, but also a major regional destination for Fayetteville residents and visitors. The entire Skibo Road corridor between Raeford Road and Bragg Boulevard caters to big-box retail shoppers and contains the majority of Fayetteville, as well as Cumberland County’s, retail employment base.

Cape Fear Valley Health System: The Cape Fear Valley Health System includes seven different medical facilities located five miles southwest of Bragg Boulevard at the intersection of Owen Drive and Village Drive. It is the 9th largest health system in the state, with 765 beds and more than 935,000 patient visits annually. Cape Fear Valley Health System is Cumberland County's largest non-government employer, with 4,800 employees and 500 physicians on staff.

**Table 3-6: Employment by Sector – Cumberland County and Fayetteville 2010**

Industry	2010 Employment		City
	County	City	Share
Agriculture, Forestry, Fishing, Hunting & Mining	197	N/A	N/A
Construction	5,137	3,175	61.8%
Manufacturing	7,471	5,642	75.5%
Wholesale Trade	2,427	1,516	62.5%
Retail Trade	15,057	9,926	65.9%
Transportation and Warehousing, Utilities	4,793	2,530	52.8%
Information	1,481	1,333	90.0%
Finance and Insurance, Real Estate and Rental/Leasing	4,145	3,059	73.8%
Professional, scientific, and management, and administrative and waste management services	12,853	5,272	41.0%
Educational, Health Care, and Social Assistance Services	34,097	19,863	58.3%
Arts Entertainment and Recreation, Accommodation and Food Services	13,933	7,526	54.0%
Other Services Ex. Public Admin	3,227	2,904	90.0%
Public Administration	12,679	7,085	55.9%
Unclassified	38	0	0.0%
<b>Total</b>	<b>117,497</b>	<b>69,831</b>	<b>59.4%</b>

Source: North Carolina Employment Security Commission, U.S. Census Bureau

[Fayetteville State University](#): Fayetteville State University is located on the east side of Murchison Road between Edgecombe Avenue and State Street just outside of the study area. It is historically an African-American school with a current enrollment of nearly 6,600 students. The University is a full-time, four-year institution with courses focused on the arts and sciences, health professions, business and economics, and unique and emerging fields. Current full-time faculty, instruction, research, and public service employment is estimated at more than 900. Because of its proximity to Bragg Boulevard, its community-based curriculum, and a \$45.5 million campus construction and renovation campaign currently underway to accommodate additional students, Fayetteville State has the potential to play a role in the revitalization of the corridor, particularly the segments closest to downtown Fayetteville.

**Table 3-7: Tax Shares in the Study Area**

Land Use	Tax Value	Percent Share
Residential	\$687,189,894	66.0%
Commercial	\$353,266,698	34.0%
<b>Total</b>	<b>\$1,040,456,592</b>	<b>100.0%</b>

Source: Cumberland County

Included in the residential category are:

- Single-family detached
- Single-family attached
- Townhouses
- Condominiums
- Apartments
- Manufactured/Mobile Homes

All other uses in the study area are included in the commercial category, except for Institutional uses, which are exempt from taxation.

Table 3-8 indicates tax values by land use. All tax values are for improved properties only. For residential uses, the tax value per unit statistic can be used to compare between the various types. Duplexes/Triplexes/and Quads have the lowest tax value per unit at \$51,585 per acre, while single-family detached uses have the highest tax value per unit at \$113,515 per acre.

It is important to note that although the single-family per unit tax value is more than double that of duplex/triplex/quads, its tax value per acre is lower. This is due to single-family detached uses being located on larger parcels, indicating the potential tax revenue benefits of higher density housing. This is also evident when calculating the tax value per acre for apartments, which is \$485,074, higher than both single-family detached and attached uses. Among commercial development, hotel/motel uses generate the most tax revenue per acre in the study area with a tax value per acre of nearly \$1.9 million. Townhouse development has the second-highest tax value per acre within the study area at \$1.24 million. Retail tax value per acre amounts within the study area range from \$273,742 for auto dealerships to \$588,499 for sports/health spas (work-out facilities). As it relates to industrial uses in the study area, the tax value per acre equates to \$173,433, the lowest of all commercial properties. This value was calculated by averaging the tax values for those parcels identified as industrial in the Cumberland County tax records, and also including warehousing and distribution facilities currently categorized as commercial under the land use codes from C450 to C452 and C454 to C458. Land within the Military Business Park is not included.

***Tax Base***

Based on Cumberland County tax data, land uses within the study area have a combined tax value of more than \$1 billion, as summarized in Table 3-7. Since the study area includes neighborhoods that back up to the commercial uses along the Bragg Boulevard corridor, the share of the study area tax base comprised by residential uses equates to 66 percent of the total, with commercial uses representing the remaining 34 percent.

**Table 3-8: Tax Value in the Study Area**

Land Use	Tax Value per Acre*	Tax Value per Unit**
Single Family	\$320,218	\$113,515
Duplex, Triplex, Quad	\$384,655	\$51,585
Townhouse	\$1,242,166	\$107,404
Condominium	\$930,454	\$81,390
Apartment	\$485,074	N/A
Auto Dealership	\$273,742	N/A
Restaurant/Bar/Club	\$551,307	N/A
Office Building/Condo	\$816,755	N/A
Shopping/Retail	\$413,825	N/A
Sports/Health Spas	\$588,449	N/A
Hotel/Motel	\$1,887,869	N/A
Industrial	\$173,433	N/A

\* Includes structure    \*\* Includes land

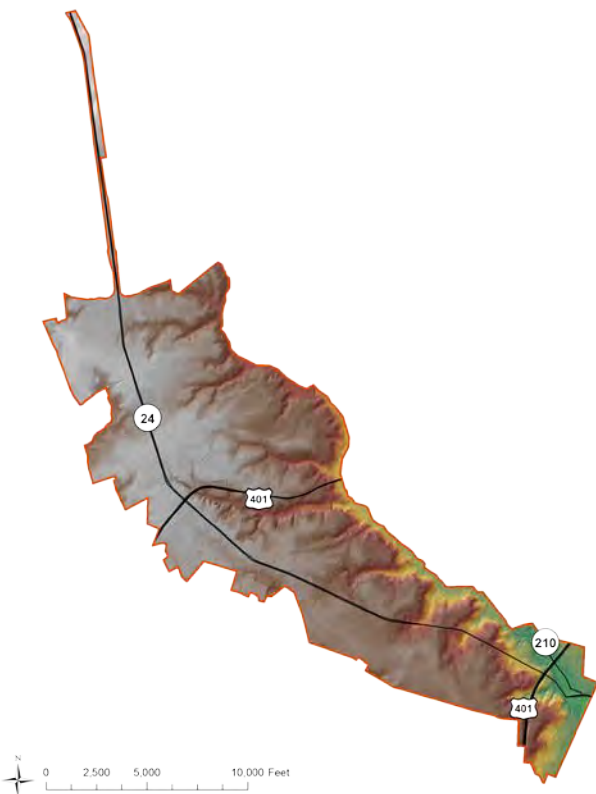
Source: Cumberland County



Physical and Natural Resources

The recommendations of the Bragg Boulevard Corridor Redevelopment Plan will reflect the unique physical and natural features of the corridor. The sections below describe the topography, soils and farmland, tree cover, water resources, and floodplain characteristics of the study area.

Figure 3-5: Topography in the Study Area



Topography

The topography of the study area is illustrated in Figure 3-5. Although the study area is generally flat, the terrain shifts just west of downtown Fayetteville (within Segment B) in line with statewide geography. This zone marks the transition from the relatively flat Coastal Plain Region to the rolling hills of the Piedmont Region. Beginning at the southern limit of the study area, Bragg Boulevard generally climbs heading west in Segments A and B and then levels out north of McPherson Avenue. Past this point, the roadway becomes relatively flat.

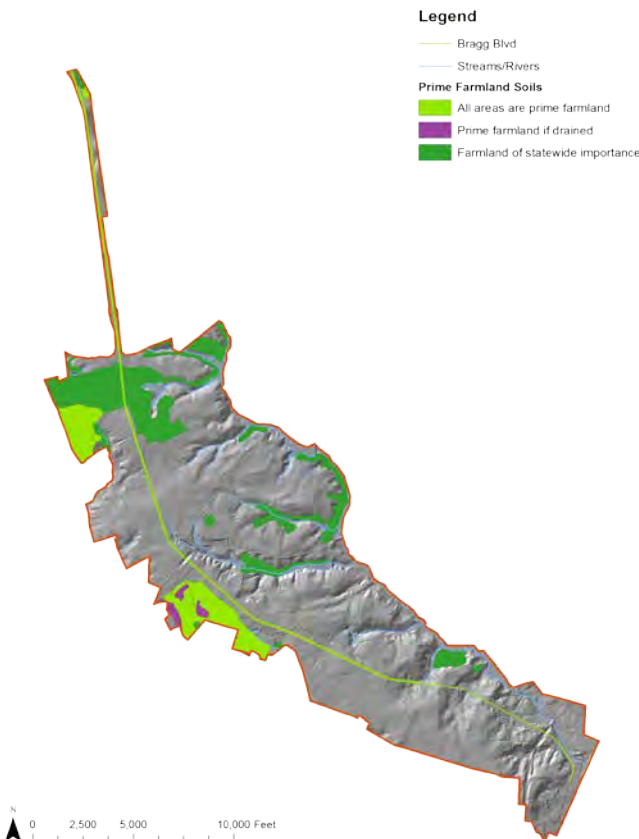
Soils and Farmland

The study area contains a variety of soil types and classified farmlands, as shown in Figure 3-6. Within Segment E just south of Fort Bragg, a large tract of land is classified as farmland of statewide importance. This classification, however, does not prohibit land from being developed, as is evident by the fact that the Military Business Park is currently being developed in this location. Additionally, farmland of statewide importance is scattered throughout other portions of the study area, particularly in the vicinity of surface waters. In total, the study area contains 594.1 acres of farmland of statewide importance.

Two major tracts of prime farmland are also present west of Bragg Boulevard in the northern and central portions of the study area. The combined size of these tracts is 253.2 acres.

These two soil classifications relate to the suitability of the soil for agriculture. However, there are no active agricultural operations in these areas or anywhere within the study area.

Figure 3-6: Farmland Soils in the Study Area



Forested Areas/Tree Cover

Tree cover in the study area is a mixture of hardwood and deciduous trees. While there are few large tracts of trees in the area due to development, substantial tree cover can be found along most of the eastern boundary of the study area following the trajectory of Little Cross Creek. This linear area of tree cover encompasses Mazarick Park, Mintz Pond, Clarks Pond, Kornbow Lake, and Bonnie Doone Lake. Additionally, a future park is planned to the east of Bragg Boulevard in the eastern limit of Segment E. This 465-acre area is currently undeveloped and has extensive tree cover.

Aside from these tracts, trees are generally dispersed in smaller patches throughout the study area. Most neighborhoods in the study area are well treed, but commercial and retail areas have very limited tree cover and minimal landscaping. To the north and west of the future I-295 interchange, many trees were knocked down and cleared as a result of a tornado in 2010.

Water Resources

A variety of water resources are present within the study area, including several lakes and ponds. These include the following:

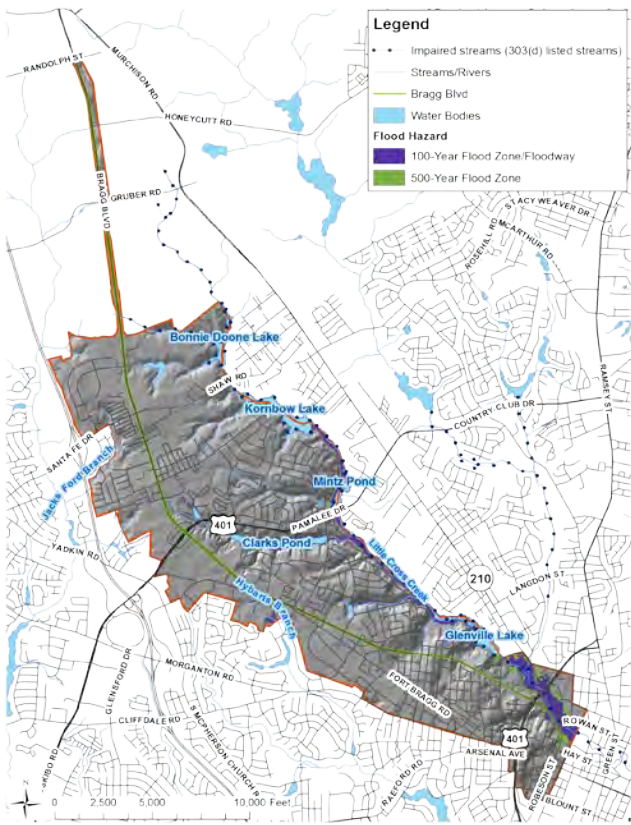
- Glenville Lake
  - Little Cross Creek
  - Clarks Pond
  - Hybarts Branch
- Mintz Pond
  - Kornbow Lake
  - Jacks Ford Branch
  - Bonnie Doone Lake

Additionally, a number of smaller ponds and tributaries are distributed throughout the study area. Surface waters comprise a total of 131.6 acres of the study area. Among the water bodies in the study area, Little Cross Creek (also referred to as Cross Creek) is listed as a 303(d) Impaired Stream. Water resources in the study area are shown in Figure 3-7. A portion of the study area to the east of Bragg Boulevard is located within a Watershed Water Supply Area, where regulations limit the amount of impervious surface to 70 percent.

Floodplains

The study area contains 58.3 acres of 100-year floodplain, indicating a significant risk of flooding. Veteran’s Park is on 10.8 acres of the total study area acreage in the 100-year floodplain. The area also contains 225 acres of 500-year floodplain, which are similarly susceptible to inundation in the event of a 500-year flood event. Floodplain areas in the study area are shown in Figure 3-7.

Figure 3-7: Water Resources and Flood Hazards



Cultural and Community Resources

The study area contains a variety of cultural and community resources, including historic districts and sites, buildings of architectural significance, community gathering places, parks, schools, museums, and churches. These resources are described in the sections that follow.

Key Historic Districts and Sites

The **Haymount Historic District** is located in the downtown core, or Segment A of the study area. This district has been listed on the U.S. National Register of Historic Places since 1983 and a boundary increase was listed in 2006. The area is primarily residential, with homes built between approximately 1817 and 1950 and displaying a variety of architectural styles. Currently home to 41 dwellings, the Haymount Historic District is described as “one of Fayetteville’s oldest and most cohesive neighborhoods.”<sup>1</sup>

The **Holt-Harrison House** is also listed on the U.S. National Register of Historic Places and located in Segment A of the study area. Built in 1897 as a single-family dwelling, this structure has served a variety of residential and commercial uses throughout its history and currently houses a law firm. The Colonial Revival style of the building influenced the architecture of the surrounding residential area. The home is dually named for Walter L. Holt, its founder and an influential textile industrialist; and Jesse Harrison, a Fayetteville mayor who later owned the home.<sup>2</sup>

The **Cape Fear Historical Complex**, also located in Segment A, contains a number of historic and cultural resources. Exhibits at the Museum of the Cape Fear present the history of southern North Carolina from pre-colonial days through the early 20th century. The area occupied by Arsenal Park originally served as a manufacturing and storage site for ordnance; this arsenal was used by the Confederacy and destroyed by Union troops during the Civil War. Also on-site is the 1897 Poe House, a historic dwelling that now offers tours describing the major social, technological, and economic trends of the early 20th century.<sup>3</sup>

A more extensive listing of historic districts, historic sites, and cultural sites for each study area segment is included in the Corridor Segment Profiles section (3.2) beginning on page 37.

Other Buildings of Potential Historic or Architectural Significance

According to the City of Fayetteville Historic Properties Manager, the following buildings along Bragg Boulevard are of historic or architectural significance:

- 542 Bragg Boulevard (corner of Bragg Boulevard and Rowan Street, Segment A) – circa 1947 gas station currently in use as “Cheap Charlie’s Glass Co.,” which also serves as a used auto sales establishment.



<sup>1</sup> [http://www.livingplaces.com/NC/Cumberland\\_County/Fayetteville\\_City/Haymount\\_Historic\\_District.html](http://www.livingplaces.com/NC/Cumberland_County/Fayetteville_City/Haymount_Historic_District.html)  
<sup>2</sup> <http://www.visitfayettevillenc.com/historicsites/index/list/page/2>  
<sup>3</sup> <http://museumofthecapefear.ncdcr.gov/index.html>





- 809 Bragg Boulevard (corner of Bragg Boulevard and Martin Luther King Jr. Freeway, Segment B) – previously Ormond’s Dry Cleaners, currently vacant.
- 927 Bragg Boulevard (Segment B) – significant art deco structure, currently vacant.
- 974 Bragg Boulevard (corner of Bragg Boulevard and Ames Street, Segment B) – previously identified as endangered modern architecture due to unique roofline; currently in use but nature of use is uncertain.
- 1021 Bragg Boulevard – previously “The Barn” restaurant, vacant and in disrepair (Segment B).
- Eutaw Village (Segment D) – one of the earliest shopping centers circa 1950s, currently in good repair and in use as a shopping center.
- 3901 Bragg Boulevard – old gas station; currently serves an automobile use and is in relative disrepair (Segment D).
- 5900 Bragg Boulevard (corner of Bragg Boulevard and Shaw Street, Segment E) – large wooded site with historic Buena Vista house circa 1840s.

While none of these buildings have been formally designated with the U.S. National Register of Historic Places, some have previously been identified as part of an architectural survey. These structures serve as community resources by contributing to the historic character of the corridor.

### *Community Gathering Places*

The study area contains several unique locations that serve as community gathering places. **Festival Park** is located adjacent to (and partially within) the southern limit of the study area (Segment A). This outdoor theatre hosts concerts and festivals with an attendance capacity of 10,000. The **Bragg Boulevard Flea Market Plaza**, located in Segment D, operates every weekend and brings more than 150 regular vendors; this site also hosts a farmers market that serves as an additional center of activity. A number of formal recreation spaces are also located within the corridor study area, including a bowling alley and skating center.

### *Parks*

In addition to the Festival Park site and a number of small pocket parks, the following larger community parks are located within the study area:

- **Veterans Park** (Segment A) is the first North Carolina state park dedicated to veterans from all branches of the U.S. Armed Services. The park is bounded by Bragg Boulevard and Hillsboro Street, less than half a mile from the Fayetteville Amtrak Station. Key features include a visitors’ center, a memorial wall and chandelier, a 150-seat amphitheater, and interactive learning opportunities. The park is regionally accessible, but there are no residential neighborhoods adjacent to the park.
- **Mazarick Park** is located in the eastern portion of the study area (Segment C). This recreational resource features Glenville Lake and offers a variety of recreational amenities including fishing, boat rentals, sports fields, tennis courts, disc golf, playgrounds, trails, and picnic areas. The main access point is Belvedere Avenue, near Willis Elementary School. Most visitors, including many who have properties adjacent to the park, would need to use Bragg Boulevard to access the park via bike or auto.



- **Honeycutt Park**, located adjacent to Fayetteville Technical Community College on the border between Segments C and D, offers sports fields, a walking path, playgrounds, and greenspace. The Kiwanis Recreation Center is located within Honeycutt Park and offers a gymnasium, meeting space, and a banquet room. The park is lined with sidewalks and includes multiple access points for pedestrians; however, most of the surrounding uses are not residential.
- **Rowan Park** is located near the downtown core in Segment A, close to Veterans Park, and includes a pavilion, band shell, and playground. Much of the park is dated and in disrepair, including tennis courts that are not usable in their current condition. Two major roads – U.S. Route 401 and Bragg Boulevard – bound most of the park so there are currently few connections to the surrounding neighborhoods.

These resources provide open space, recreational opportunities, and gathering places for the community surrounding Bragg Boulevard.

### *Schools and Museums*

The study area contains a number of educational resources, including three public K-12 schools, Fayetteville Technical Community College, and the Airborne and Special Operations Museum.



**Margaret Willis Elementary School** (border of Segments B and C) is a public school serving 317 students in grades Pre-K through 5. The school is located in a residential neighborhood of single-family homes between Glenville Lake and Mazarick Park. The neighborhood streets have sidewalks making the school pedestrian and bicycle accessible.

**Alma Easom Elementary School** (Segment C) is a public school serving 281 students in grades K through 2. The school is located in a residential neighborhood of one- and two-story family homes and apartment houses. Surrounded by local streets with sidewalks, the school is accessible to nearby students by walking and biking.

**Terry Sanford High School** (Segment C) is a public high school (grades 9-12) with a current enrollment of 1,364 students. The school is located in a residential neighborhood of one- and two-story family homes and apartment houses. It fronts on Fort Bragg Road, which has sidewalks on both sides of the street and a signalized crosswalk in front of the school. The high school is less than one mile from Fayetteville Technical Community College.

**Alger B Wilkins Elementary School** (Segment D) is a public school serving 231 students in grades Kindergarten through 5. The school is located in a commercial area of Skibo Road, approximately 0.25 miles southwest of Bragg Boulevard; however, the school's district extends beyond Bragg Boulevard. There are sidewalks in front of the school which extend north east under the Bragg Boulevard overpass. However, high speeds and traffic volumes along Skibo Road present barriers to walking in the vicinity of the school.

The main campus of **Fayetteville Technical Community College** (FTCC) is located primarily in Segment D (with some facilities in Segment C) off Fort Bragg Road west of Bragg Boulevard. There are some ancillary uses along Bragg Boulevard associated with the college, including the Baymont Inn and



Suites, as well as some retail shops. With a student population of 10,000, FTCC is the fourth largest community college in North Carolina and has the largest continuing education program in the state. The main campus has ample vehicle parking across thirty-one surface lots for faculty, staff, and students. While there is no FTCC-sponsored shuttle or bus service, the campus is served by Fayetteville Area System of Transit (FAST) six days a week.

Additionally, the **Airborne and Special Operations Museum** is located in the downtown core (Segment A). Established in the mid-1990s through a combination of private and public funding, this museum educates visitors on the history, technology, and art associated with U.S. Army airborne and special operations. The museum has been a key part of downtown revitalization in Fayetteville, drawing visitors from across the country and bringing subsequent economic benefits to the area. The museum has a surface parking lot available to visitors, and is adjacent to the Fayetteville Amtrak station. Like FTCC, the museum is located along a FAST bus route that serves downtown Fayetteville.

*Churches/Religious Institutions*

The study area contains more than 20 churches and places of worship of varying denominations. Several of these community resources are identified in the individual segment profiles in the next section of this report.



Corridor Segment Profiles

The following sections describe existing conditions related to land use, development, demographics, economic characteristics, natural and physical resources, and community and cultural resources for each individual segment of the study area.

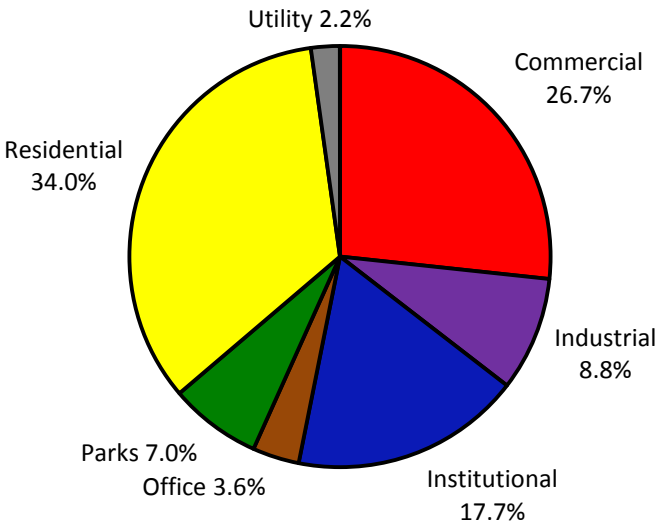
Segment A Profile: Downtown Core

Segment A: Downtown Core is in the eastern portion of the study area. This segment extends from the intersection of Cumberland Street with Hillsboro Street (northern boundary) to the intersection of Robeson Street with Italy Street (southern boundary). The character of development within this segment is typical of a Central Business District, with a mix of high density uses, primarily including residential, institutional, office, and industrial development with some park/open space scattered throughout. Key characteristics of this segment are summarized in the following sections.

Land Use

Segment A contains a mixture of residential, retail, institutional, recreational, and other (utility, industrial, and office) uses. The distribution of land by type of use is shown in the chart below, and land use and zoning maps are shown in Figures 3-8 and 3-9.

Residential and retail are the most common land uses in Segment A. The majority of housing in Segment A is located west of Bragg Boulevard and Robeson Street, although some residential properties are located north of Bragg Boulevard along Greensboro, Edwards, and Moore streets. A variety of housing types are present, including single-family detached residences, townhomes, and multiplexes. Townhome complexes include Olde Towne Village on Athens Avenue and Victorian Place. Segment A features one of the most historic communities in Fayetteville, the Haymount Historic District. Residential properties in Haymount were constructed between the early 1800s and mid-1900s. The district is registered on the National Register of Historic Places. Residential properties north of Bragg Boulevard are primarily single-family dwellings.



Commercial uses in Segment A are primarily in the form of strip retail development. Types of establishments include fast food restaurants, small businesses, beauty salons, automobile repair shops, hotels, wholesale suppliers, warehouses, and a nightclub. These establishments are primarily located along Robeson Street and Bragg Boulevard.

Institutional uses in Segment A include the Airborne and Special Operations Museum Foundation, Highsmith Rainey Specialty Hospital, Cumberland County medical services, the Museum of the Cape Fear Historical Complex, churches, and medical facilities. Open space features include Rowan Park, Veterans Park, and small neighborhood parks.



Figure 3-8: Segment A- Downtown Core- Land Use

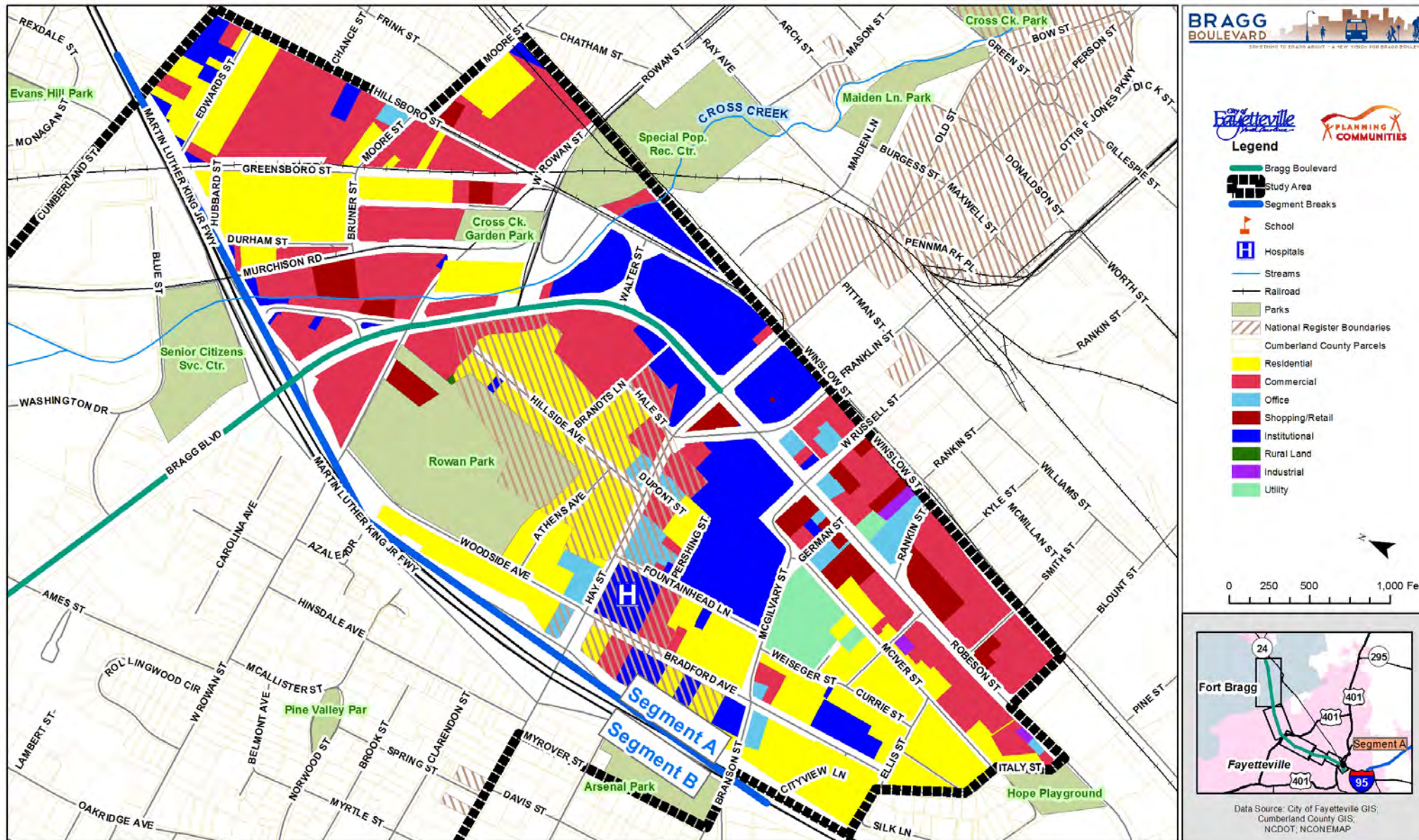
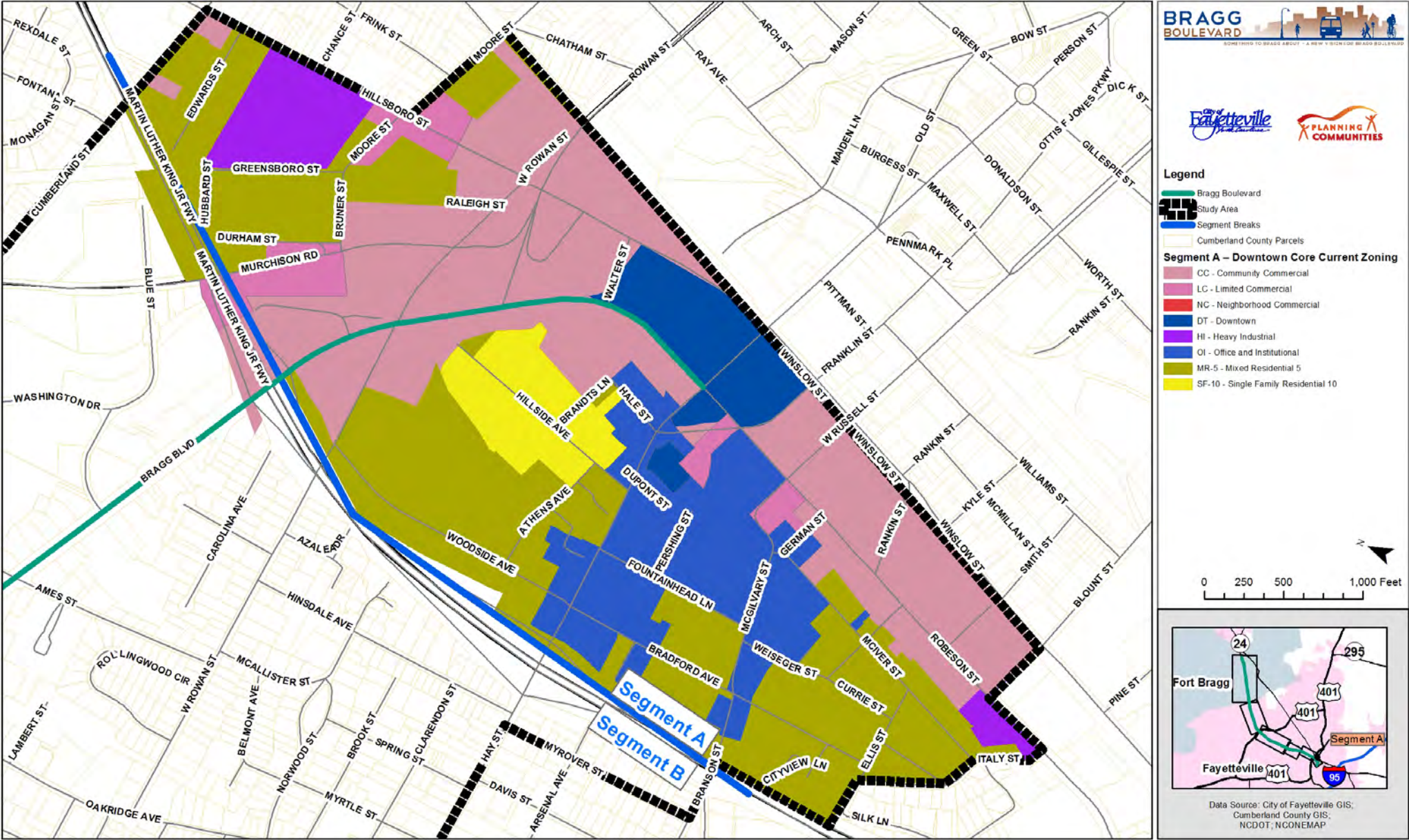




Figure 3-9: Segment A- Downtown Core- Current Zoning



*Development Patterns/Trends*

Although transportation facilities are oriented to the automobile in Segment A, development is in somewhat of a grid pattern due to the age of this area and its location within the downtown core. This pattern lends itself to land use connectivity, but multimodal accessibility is currently limited. The vacant, City-owned, former Days Inn 5.4-acre site along Bragg Boulevard east of the Haymount Historic District is currently out for bid and represents an opportunity for future development.

*Demographic Highlights*

The total population of Segment A is 3,637. This portion of the total study area exhibits a high minority presence, with 80 percent of the population describing themselves as black or African American. The area also demonstrates relatively low educational attainment, with only approximately 10 percent of the population receiving a Bachelor’s degree or higher. Segment A demographic highlights are presented in Table 3-9.

*Economic Characteristics*

As previously described, Segment A contains a wide range of retail uses primarily in the form of strip development. The Highsmith Rainey Specialty Hospital is a significant economic driver. Approximately 70 percent of households in Segment A earn less than \$30,000 and nearly 40 percent of the population lives below the poverty level. Furthermore, 22.8 percent of individuals are classified as “very poor” (below 50 percent of poverty level). The majority of housing units in the area are renter-occupied. Select socio-economic characteristics for Segment A are presented in Table 3-10.

*Summary of Physical, Natural, Cultural, and Community Resources*

While much of Segment A is developed, there is undeveloped land along Bragg Boulevard across from Veterans Park. This open, vacant area is classified as commercial and includes the vacant Days Inn site mentioned above as a possible redevelopment opportunity. Cross Creek traverses the northern portion of Segment A.

This portion of the study area contains a number of cultural and community resources, including churches, healthcare facilities, museums, and historic structures. These resources are listed and briefly described below and shown in Figure 3-10.

**Table 3-9: Segment A - Demographic Profile**

Population	Number of Persons	Percent of Total
Total population	3,637	-
Age	Number of Persons	Percent of Total
Under 18	732	20.1%
18-64	2447	67.3%
65 and over	458	12.6%
Race	Number of Persons	Percent of Total
White alone	565	15.5%
Black or African American alone	2,910	80.0%
Indian or Alaska Native alone	68	1.9%
Asian alone	0	0.0%
Hawaiian or Pacific Islander alone	11	0.3%
Some other race alone	0	0.0%
Two or more races	83	2.3%
Ethnicity	Number of Persons	Percent of Total
Hispanic or Latino	66	1.8%
Not Hispanic or Latino	3,571	98.2%
Limited English Proficiency of Population Over 5	Number of Persons	Percent of Total
Population that speaks English less than “very well” (all languages)	34	1.0%
Educational Attainment of Population Over 25	Number of Persons	Percent of Total
Less than high school	736	30.7%
High school graduate/equivalency	621	25.9%
Some college	778	32.4%
Bachelor’s degree	203	8.5%
Master’s degree	62	2.6%
Professional school degree	0	0.0%
Doctorate degree	0	0.0%

Table 3-10: Segment A- Socio-Economic Profile

Income	Number of Households	Percent of Total
Less than \$15,000	466	38.3%
\$15,000 to \$29,999	390	32.0%
\$30,000 to \$49,999	203	16.7%
\$50,000 to \$74,999	98	8.0%
\$75,000 to \$149,000	51	4.2%
\$150,000 or more	10	0.8%
Poverty	Number of Persons	Percent of Total
Below poverty level	1,035	39.1%
Below 50 percent of poverty level	603	22.8%
Between 100 and 150 percent of poverty level	572	21.6%
Housing Tenure	Number of Units	Percent of Total
Owner occupied housing units	456	37.4%
Renter occupied housing units	762	62.6%

Churches/Religious Institutions

- Peace Memorial Christian Church
- St. Michael the Archangel

Gathering Places and Entertainment Centers

- Airborne and Special Operations Museum
- Cape Fear Historical Complex
- A night club

Civic Resources

- Offices of the Libertarian Party of Cumberland County

Parks

- Rowan Park is located just east of Martin Luther King Jr. Freeway (Route 401). There are currently few connections from the park to surrounding neighborhoods, and much of the park is dated and in disrepair.

Medical Resources

- Highsmith Rainey Specialty Hospital
- Cumberland County Mental Health Services
- Haymount Institute (substance abuse and counseling)
- Quaker House Military Counsel (social welfare services for the military)

Historic Districts and Sites

- The Haymount Historic District, located between Martin Luther King Jr. Freeway and Bragg Boulevard
- 1897 Poe House, 206 Bradford Avenue
- Charles Rose House, 215 Hillside Avenue
- Colton-Clark-Monaghan House, 113 Hillside Avenue
- Dr. A.S. Rose House, 218 Hillside Avenue
- Edward J. Hale House Civil War Trails Marker, 630 Hay Street
- Hale House, 630 Hay Street
- Holt-Harrison House, 806 Hay Street
- Iron Mike Statue, 100 Bragg Boulevard
- McGary-Small House, 207 Bradford Avenue
- McMillan-Rankin House, 110 Bradford Avenue
- Rankin House and Gardens, 230 Hillside Avenue
- Robert Strange Town House, 114 Hale Street
- Smith Lauder House, 118 Hillside Avenue
- The Etta Bell Clark Monaghan House, 119 Hillside Avenue
- The Gardens, 204 Hillside Avenue
- The Huske House, 111 Hale Street
- The Pond House, 227 Hillside Avenue

Buildings of Architectural Significance

- 542 Bragg Boulevard (corner of Bragg Boulevard and Rowan Street) – circa 1947 gas station currently in use as “Cheap Charlie’s Glass Co.”



**Figure 3-10: Segment A- Downtown Core- Cultural Resources**





**Segment B Profile – Bragg Boulevard CBD**

Segment B of the study area is located between the intersections of Bragg Boulevard with U.S. 401 (southern boundary) and Westmont Drive (northern boundary). The development character along this segment is generally urban commercial, including high density retail, office, and industrial uses backing up to residential neighborhoods. In addition, Glenville Lake provides a natural resource amenity just east of Bragg Boulevard. Key characteristics of this segment are summarized in the following sections.

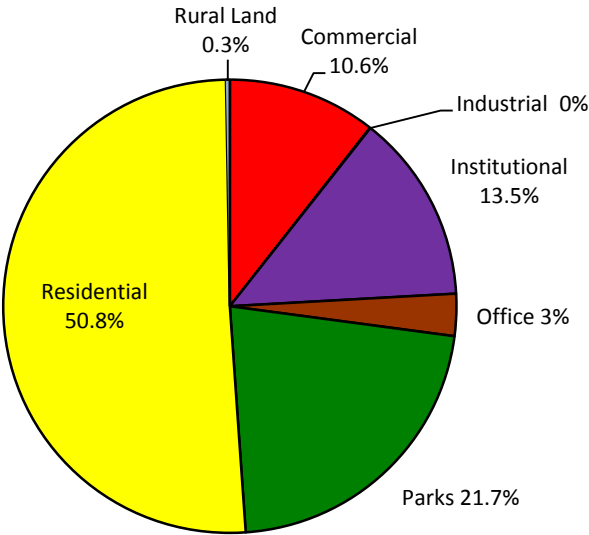
**Land Use**

Segment B contains a mixture of residential, retail, institutional, and recreational uses. The distribution of land by type of use is shown in the chart to the right, and land use and zoning maps are shown in Figures 3-11 and 3-12.

The most common land use in Segment B is residential, followed by recreational/parks. The majority of housing in Segment B is located to the west of Bragg Boulevard. A variety of housing types are present, including single-family detached residences, apartment complexes, and duplexes. Apartment complexes in the area include Adams Court, Clarendon Place Condominiums, and Mt. Sinai Homes.

Commercial uses in Segment B are primarily in the form of strip retail development. Types of establishments include fast food restaurants, beauty salons, car parts stores, electronic equipment stores, and nightclubs. There are also neighborhood commercial uses at the intersection of Hay Street and Oakridge Avenue. The majority of retail development is spread along the corridor with limited connectivity.

Institutional uses in Segment B include a number of churches and small medical facilities. Open space features include Mazarick Park, General Lee Park, the Martin Luther King Jr. Park and monument, and several smaller neighborhood parks. Fayetteville State University (FSU) is located just outside of the study area near the northeastern portion of Segment B.



**Development Patterns/Trends**

Development in Segment B is oriented to the automobile. Uses are fairly evenly distributed along Bragg Boulevard with no organized center and very limited connectivity. In terms of development activity, Fayetteville State University has plans to redevelop the former Washington Drive Junior High School site located in the northeastern portion of Segment B.

Figure 3-11: Segment B- Central Business- Land Use

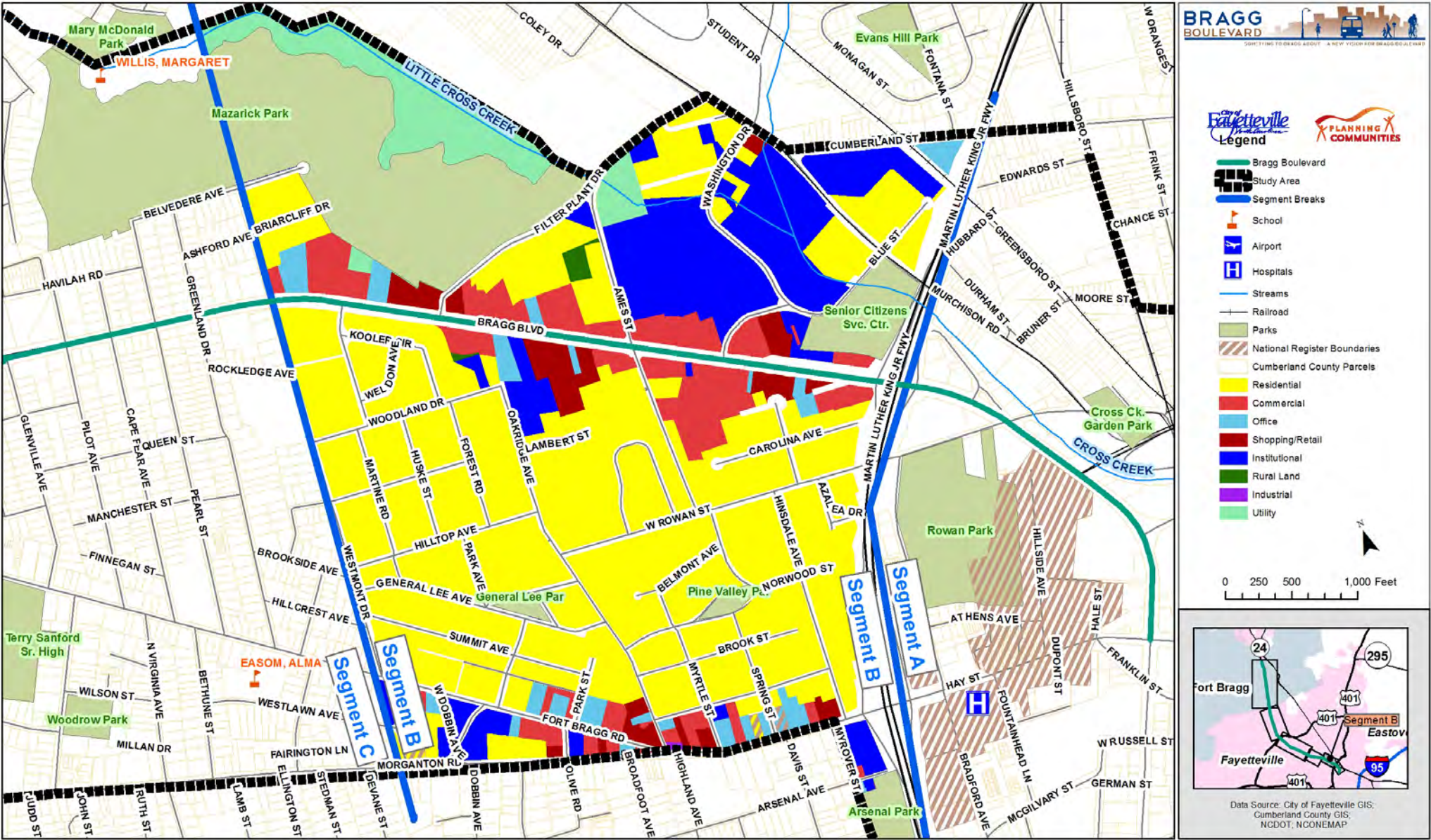
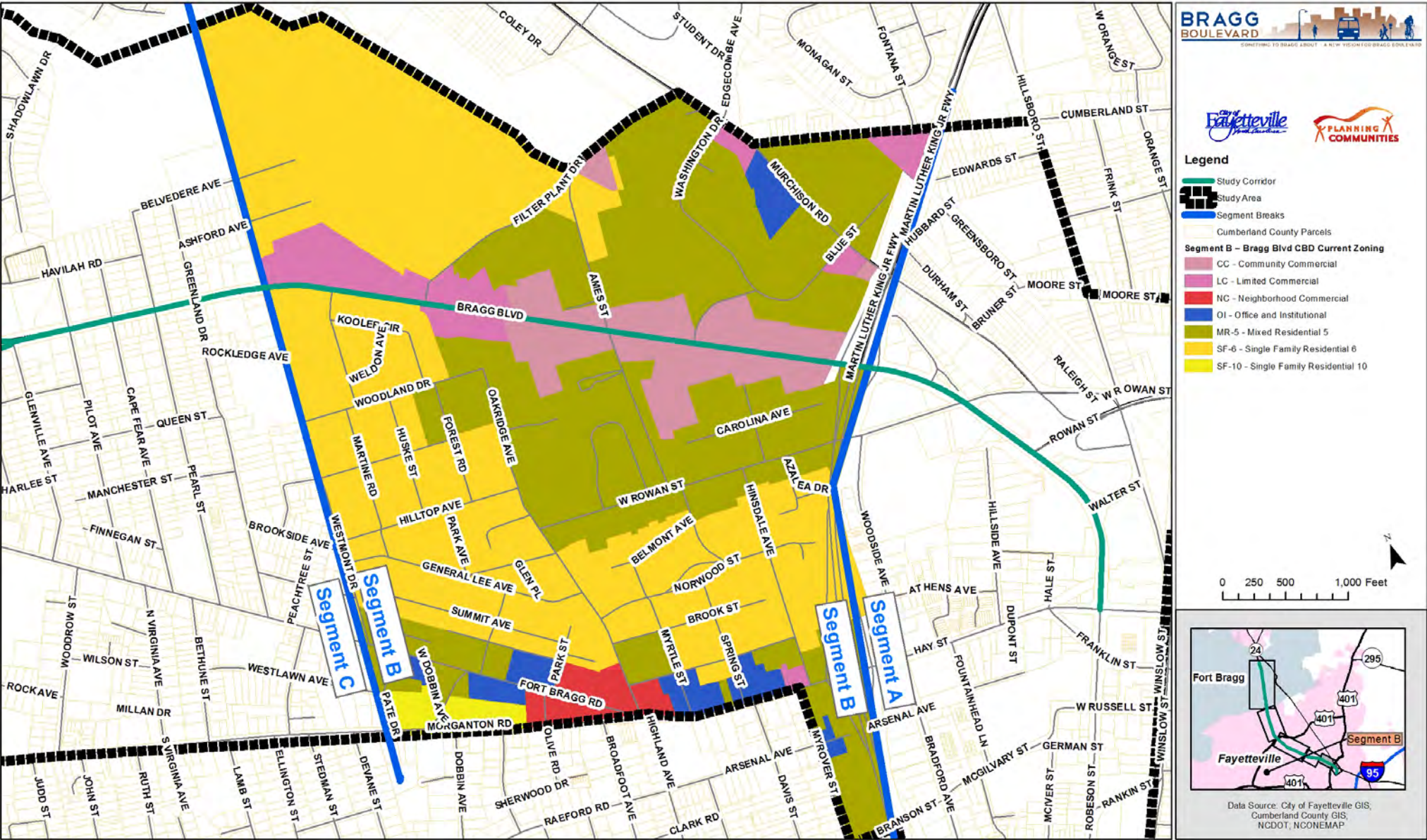




Figure 3-12: Segment B- Central Business- Current Zoning





*Demographic Highlights*

The total population of Segment B is 6,143. In this portion of the study area, fewer than 60 percent of the population describe themselves as black or African American and 34 percent describe themselves as white alone. Educational attainment data indicate that 22.4 percent hold a high school diploma and 21.6 percent have earned a Bachelor’s degree. Only 10 percent of the population over age 25 has not graduated from high school. Demographic highlights for Segment B are presented in Table 3-11.

*Economic Characteristics*

Segment B has a median household income of \$34,509. Income is fairly evenly distributed, with similar percentages of households falling within each income range, although slightly more are in the lower income brackets. Approximately one quarter of the population lives below the poverty line and 7.7 percent are classified as “very poor” (below 50 percent of poverty level). The distribution of housing units between owner-occupied and renter-occupied status is similar with slightly more owner-occupied units. Select socio-economic characteristics for Segment B are presented in Table 3-12.

*Summary of Physical, Natural, Cultural, and Community Resources*

While much of Segment B is developed, there are several parks and recreational areas. The northwestern part of the segment contains a portion of Mazarick Park, which offers a number of recreational opportunities including fishing, boating, Frisbee golf, tennis, softball, and hiking. The Senior Citizens Center is located in the northeastern portion of the segment on Blue Street and offers green space, pavilions, and walking trails. Arsenal Park, located in the southeastern corner of Segment B, is located on the former site of the City’s pre-Civil War arsenal and offers educational programming on the area’s history.

This portion of the study area contains a number of other cultural and community resources, including churches, health and education facilities, and entertainment centers. These resources are listed and briefly described below and shown in Figure 3-13.

Table 3-11: Segment B Demographic Profile

<b>Population</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Total population	6,143	-
<b>Age</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Under 18	1,086	17.7%
18-64	4,372	71.2%
65 and over	685	11.2%
<b>Race</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
White alone	2,089	34.0%
Black or African American alone	3,628	59.1%
Indian or Alaska Native alone	0	0.0%
Asian alone	41	0.7%
Hawaiian or Pacific Islander alone	0	0.0%
Some other race alone	37	0.6%
Two or more races	348	5.7%
<b>Ethnicity</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Hispanic or Latino	214	3.5%
Not Hispanic or Latino	5,929	96.5%
<b>Limited English Proficiency of Population Over 5</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Population that speaks English less than “very well” (all languages)	44	0.7%
<b>Educational Attainment of Population Over 25</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Less than high school	339	10.2%
High school graduate/equivalency	742	22.4%
Some college	1,066	32.1%
Bachelor’s degree	716	21.6%
Master’s degree	363	10.9%
Professional school degree	58	1.7%
Doctorate degree	34	1.0%

Schools and Universities

- Fayetteville State University (FSU) is located just outside of the study area near the northeastern portion of Segment B. Founded in 1867 as the Howard School; FSU is a Historically Black College or University (HBCU) and is the second-oldest public institution of higher education in North Carolina. FSU is a significant educational and economic resource for the community.

Churches/Religious Institutions

- Ebenezer Bible Church
- St. Johns AME Zion
- Alive Ministries
- Saints Constantine and Helen Greek Orthodox Church

Medical Resources

- Better Health (non-profit that helps meet the healthcare needs of low-income residents)
- Medical offices west of Hilltop House Restaurant

Entertainment/Arts Centers

- Cape Fear Regional Theatre (located just outside of the study area boundaries at the intersection of Oakridge Avenue, Morganton Road, and Highland Avenue)

Buildings of Architectural Significance

- 809 Bragg Boulevard (corner of Bragg Boulevard and Martin Luther King Jr. Freeway) – previously Ormond’s Dry Cleaners; currently vacant
- 927 Bragg Boulevard – significant art deco structure; currently vacant
- 974 Bragg Boulevard (corner of Bragg Boulevard and Ames Street) – previously identified as endangered modern architecture due to unique roofline; currently in use, but nature of use is uncertain
- 1021 Bragg Boulevard – previously “The Barn” restaurant; vacant and in relative disrepair

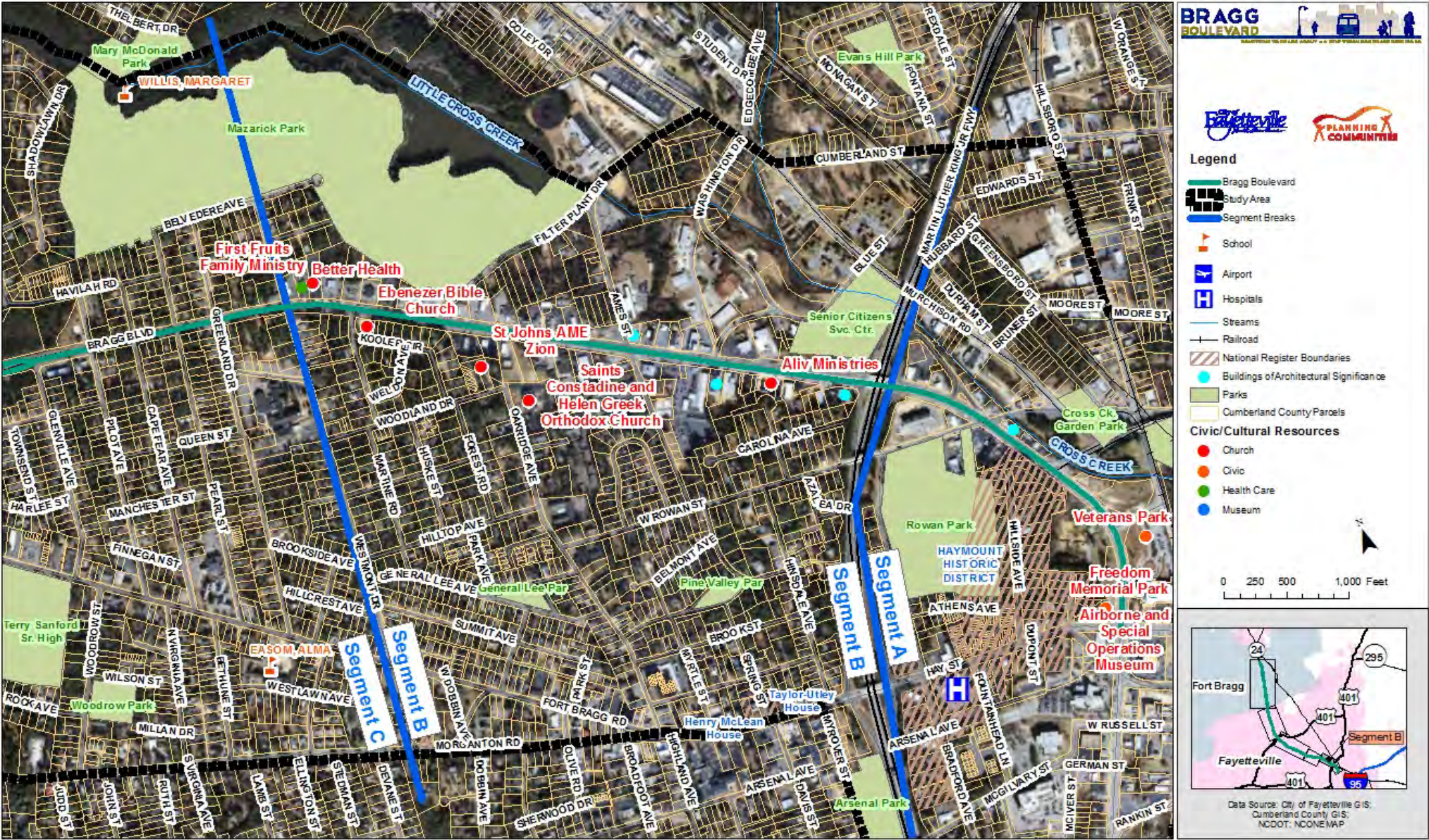
Table 3-12: Segment B Socio-Economic Profile

Income	Number of Households	Percent of Total
Less than \$15,000	486	21.3%
\$15,000 to \$29,999	531	23.2%
\$30,000 to \$49,999	413	18.1%
\$50,000 to \$74,999	338	14.8%
\$75,000 to \$149,000	463	20.3%
\$150,000 or more	55	2.4%
Poverty	Number of Persons	Percent of Total
Below poverty level	1,188	25.4%
Below 50 percent of poverty level	360	7.7%
Between 100 and 150 percent of poverty level	552	11.8%
Housing Tenure	Number of Units	Percent of Total
Owner occupied housing units	1,227	53.7%
Renter occupied housing units	1,059	46.3%





Figure 3-13: Segment B-Cultural Resources





**Segment C: Haymount**

Segment C of the study area is located between the intersections of Bragg Boulevard with Barrington Cross Street (northern boundary) and Westmont Drive (southern boundary). This segment consists of predominantly urban residential uses along both sides of Bragg Boulevard. Interwoven within these high-density residential areas are institutional facilities including local schools, parks, and churches. Bragg Boulevard was originally envisioned as a “parkway” in this segment. Key characteristics of Segment C are summarized below.

**Land Use**

Segment C contains a mixture of residential, retail, institutional, and recreational uses. The distribution of land by type of use is shown in the chart to the right, and land use and zoning maps are shown in Figures 3-14 and 3-15.

The most common land uses in Segment C are residential and recreational/parks. The majority of housing in Segment C is located to the southwest and northeast of Bragg Boulevard. A variety of housing types are present, including single-family detached residences, apartment complexes, and townhomes. Apartment complexes in the area include Hillside Apartments, Carriage Hills Apartments, and Haymount Manor Apartments. Townhome and duplex neighborhoods are located mainly in the northwestern portion of Segment C, including the Wynncrest townhomes.

There is limited retail development in Segment C with a handful of establishments including beauty salons, realtors’ offices, and insurance companies.

Institutional uses in Segment C include Terry Sanford High School, located west of Bragg Boulevard, Margaret Willis Elementary School, Alma Easom Elementary School, and a number of churches and small medical facilities. Open space features include Mazarick Park and several smaller neighborhood parks.

**Development Patterns/Trends**

Development in Segment C is oriented to the automobile. Uses along Bragg Boulevard are mainly residential and small-scale strip commercial with no organized center and very limited connectivity. A handful of vacant, wooded parcels near Bragg Boulevard’s intersection with Glenville Avenue may present opportunities for future development, although care must be taken to avoid negative impacts to the residential uses behind them.

**Demographic Highlights**

The total population of Segment C is 5,188. This portion of the study area is less racially diverse than other segments, with just under 65 percent of the population as white alone and a just under a quarter as black or African American. Educational attainment is higher than other segments, with 22.9 percent holding a high school diploma and 36.3 percent earning a Bachelor’s degree. Only 6 percent of the population over age 25 has not graduated from high school. Demographic highlights for Segment C are presented in Table 3-13.

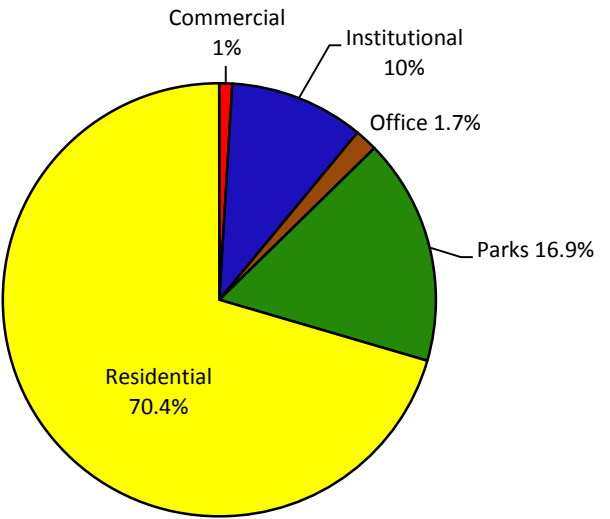
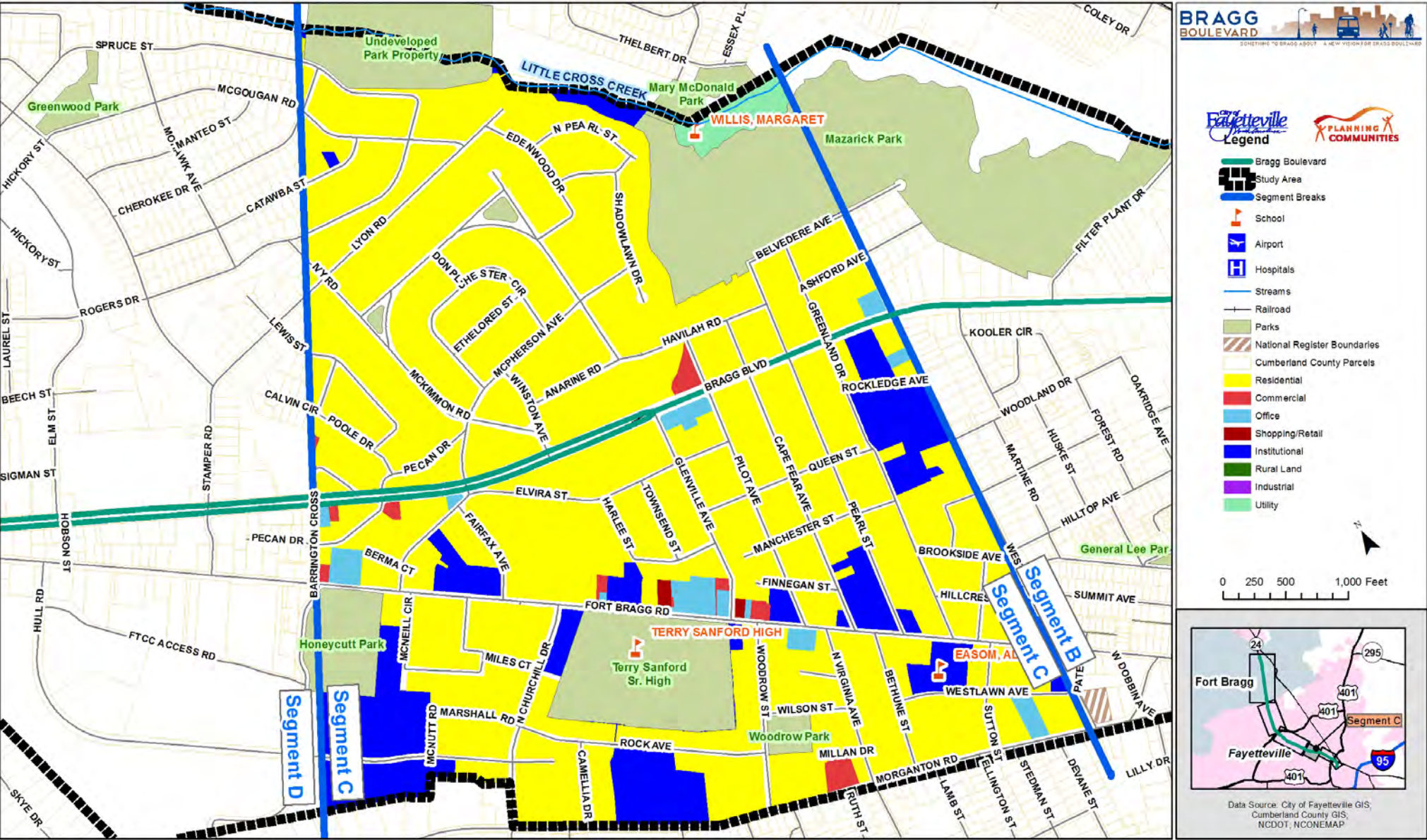
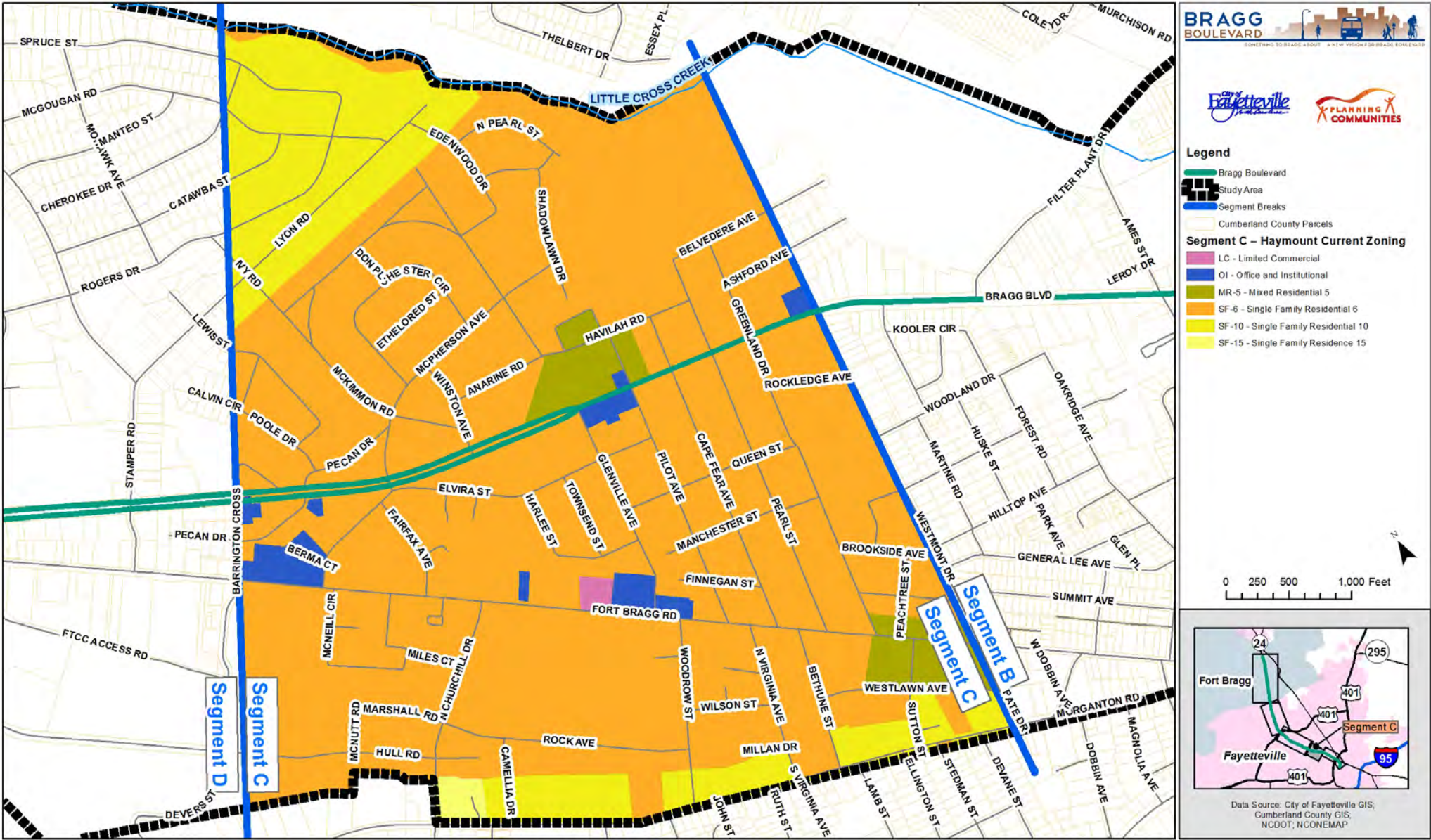


Figure 3-14: Segment C- Haymount - Current Land Use





**Figure 3-15: Segment C- Haymount – Current Zoning**



*Economic Characteristics*

As previously described, Segment C contains a limited amount of commercial uses primarily in the form of strip retail development. Most of the retail uses are located along Bragg Boulevard and Fort Bragg Road.

**Table 3-13: Segment C Demographic Profile**

<b>Population</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Total population	5,188	-
<b>Age</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Under 18	892	17.2%
18-64	3,491	67.3%
65 and over	805	15.5%
<b>Race</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
White alone	3,353	64.6%
Black or African American alone	1,371	26.4%
Indian or Alaska Native alone	31	0.6%
Asian alone	48	0.9%
Hawaiian or Pacific Islander alone	0	0.0%
Some other race alone	124	2.4%
Two or more races	26	5.0%
<b>Ethnicity</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Hispanic or Latino	343	6.6%
Not Hispanic or Latino	4,845	93.4%
<b>Limited English Proficiency of Population Over 5</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Population that speaks English less than “very well” (all languages)	187	3.8%
<b>Educational Attainment of Population Over 25</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Less than high school	214	6.1%
High school graduate/equivalency	798	22.9%
Some college	1,266	36.3%
Bachelor’s degree	788	22.6%
Master’s degree	340	9.8%
Professional school degree	0	0.0%
Doctorate degree	81	2.3%

Segment C has a median household income of \$39,765. Income is fairly evenly distributed; similar percentages of households fall within each income range, although slightly more are in the lower income brackets. Approximately 22 percent of the population lives below the poverty line and 10.6 percent are classified as “very poor” (below 50 percent of poverty level). The distribution of housing units between owner-occupied and renter-occupied status is similar with slightly more owner-occupied units. Select socio-economic characteristics for Segment C are presented in Table 3-14.

**Table 3-14: Segment C Socio-Economic Profile**

<b>Income</b>	<b>Number of Households</b>	<b>Percent of Total</b>
Less than \$15,000	539	20.9%
\$15,000 to \$29,999	493	19.1%
\$30,000 to \$49,999	412	16.0%
\$50,000 to \$74,999	536	20.8%
\$75,000 to \$149,000	442	17.1%
\$150,000 or more	160	6.2%
<b>Poverty</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Below poverty level	1,141	22.2%
Below 50 percent of poverty level	546	10.6%
Between 100 and 150 percent of poverty level	621	12.1%
<b>Housing Tenure</b>	<b>Number of Units</b>	<b>Percent of Total</b>
Owner occupied housing units	1,324	51.3%
Renter occupied housing units	1,258	48.7%



*Summary of Physical, Natural, Cultural, and Community Resources*

While much of Segment C is developed, Mazarick Park takes up a large portion of the northeastern corner. The park offers a number of recreational activities and includes the natural water feature of Glenville Lake. Honeycutt Park, located in the southwestern portion of Segment C, also offers a variety of recreational activities including playgrounds, walking paths, and baseball/softball fields.

This portion of the study area contains several cultural and community resources including churches and health and education facilities. These resources are listed and briefly described below and displayed in Figure 3-16.

Schools and Universities

- Terry Sanford High School is located in the western portion of Segment C. In addition to the classroom buildings, the campus has several athletic fields for football, baseball, tennis, and track and field events.
- Margaret Willis Elementary School is a public school for grades Pre-K through 5 located on Belvedere Avenue, north of Bragg Boulevard.
- Alma Easom Elementary School is a public school serving 281 students in grades K through 2 located on Westlawn Avenue, south of Bragg Boulevard.

Churches/Religious Institutions

- Epicenter Church
- Snyder Memorial Baptist Church
- Beth Israel Congregation Community
- Haymount United Methodist Church

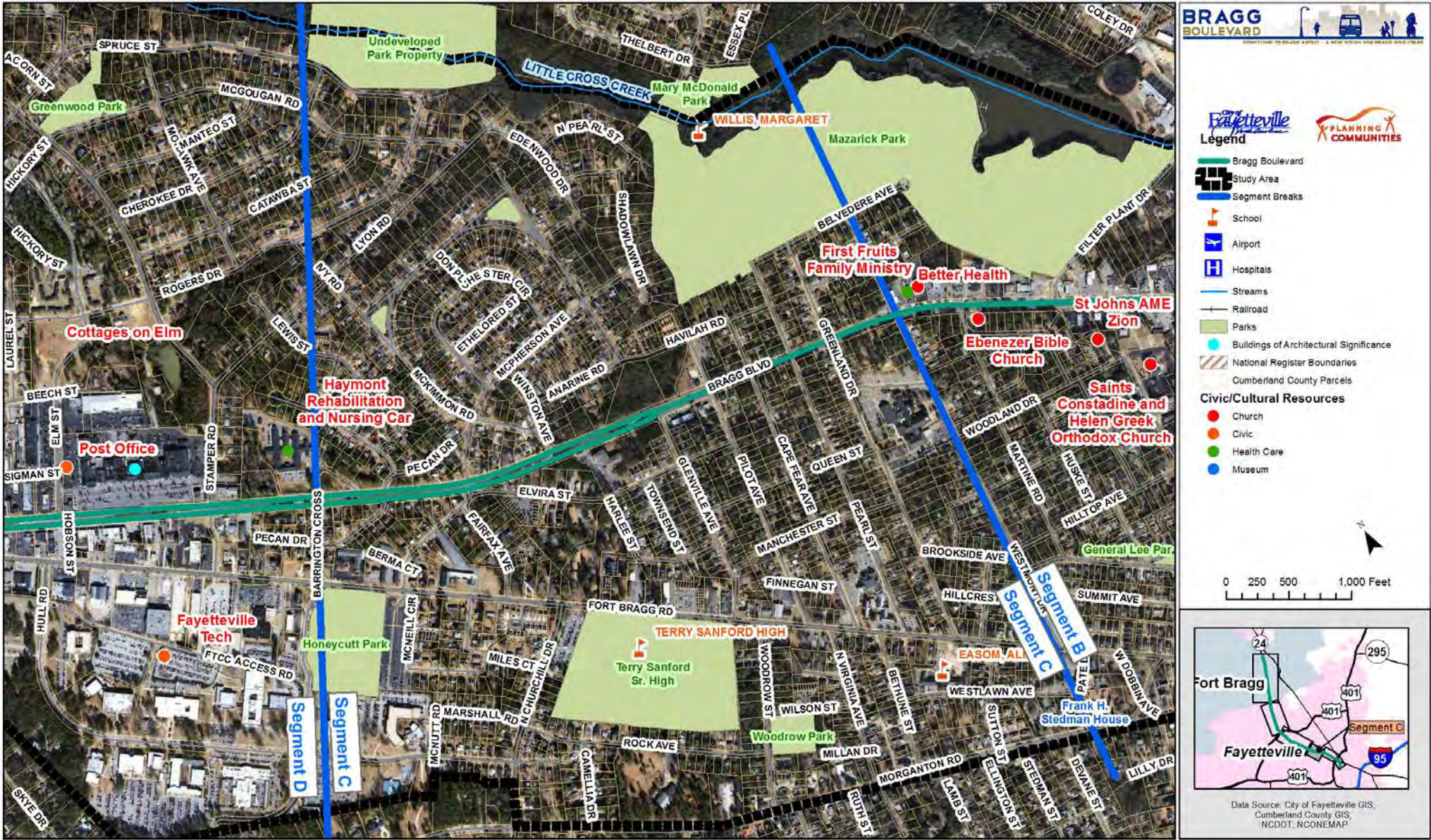
Medical Resources

- Fayetteville Children’s Clinic





Table 3-16: Segment C Civic/Cultural Resources





Segment D Profile: Eutaw

Segment D of the study area is located between the intersections of Bragg Boulevard with Pamalee Drive (northern boundary) and Barrington Cross Street (southern boundary). This segment is generally suburban commercial in nature. Eutaw is the center of retail activity along Bragg Boulevard, with a mix of shopping, restaurants, and a variety of convenience stores. Similar to most segments, stable residential neighborhoods are located to the rear of the commercial uses. Key characteristics of this segment are summarized below.

Land Use

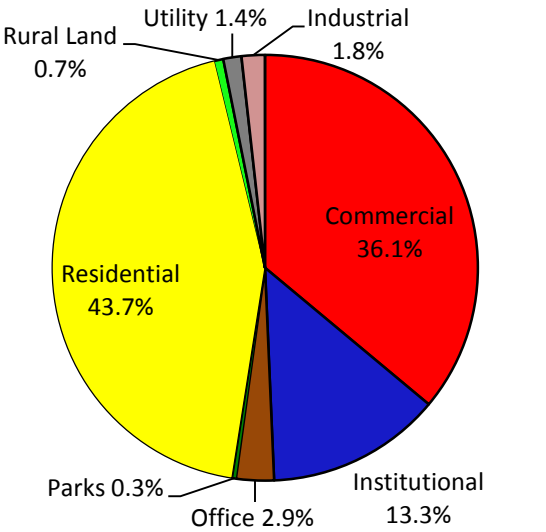
Segment D contains a mixture of residential, retail, institutional, and recreational uses. The distribution of land by type of use is shown in the chart to the right, and land use and zoning maps are shown in Figures 3-17 and 3-18.

The most common land uses in Segment D are residential and retail. The majority of housing in Segment D is located to the east of Bragg Boulevard, although some residences front the roadway particularly near the southern limit of the segment. A variety of housing types are present, including single-family detached residences, apartment complexes, duplexes, and mobile homes. Apartment complexes in the area include Galleria Place, The Villagio, and King George Apartments. Duplex neighborhoods are located mainly in the southern portion of Segment D, including the newer Cottages on Elm development.



Commercial uses in Segment D are primarily in the form of strip retail development. Types of establishments vary widely, from large grocery stores and fast food restaurants to hotels, beauty salons, and small independent shops. A large number of automobile-oriented uses, including car dealerships, rental car centers, and automobile repair shops, are located along Bragg Boulevard, as is a large flea market. Specific clusters include Horne’s Plaza, Sycamore Square, and the Eutaw Village Shopping Center, although the majority of retail development is spread along the corridor with limited connectivity.

Institutional uses in Segment D include Fayetteville Technical Community College, located west of Bragg Boulevard on Fort Bragg Road and FTCC Access Road in the southern portion of the segment and a number of churches and small medical facilities. Open space features include the Clarks Pond area and neighborhood parks, including Greenwood Park on Stamper Road.



Development Patterns/Trends

Development in Segment D is oriented to the automobile. Uses are fairly evenly distributed along Bragg Boulevard with no organized center and very limited connectivity. Recent development has included construction of The Villagio apartment complex and the Cottages on Elm neighborhood of duplexes. A three-story, \$5.3 million office building called The Palazzo is proposed on a vacant parcel adjacent to The Villagio apartment building.

Figure 3-17: Segment D- Eutaw- Current Land Use

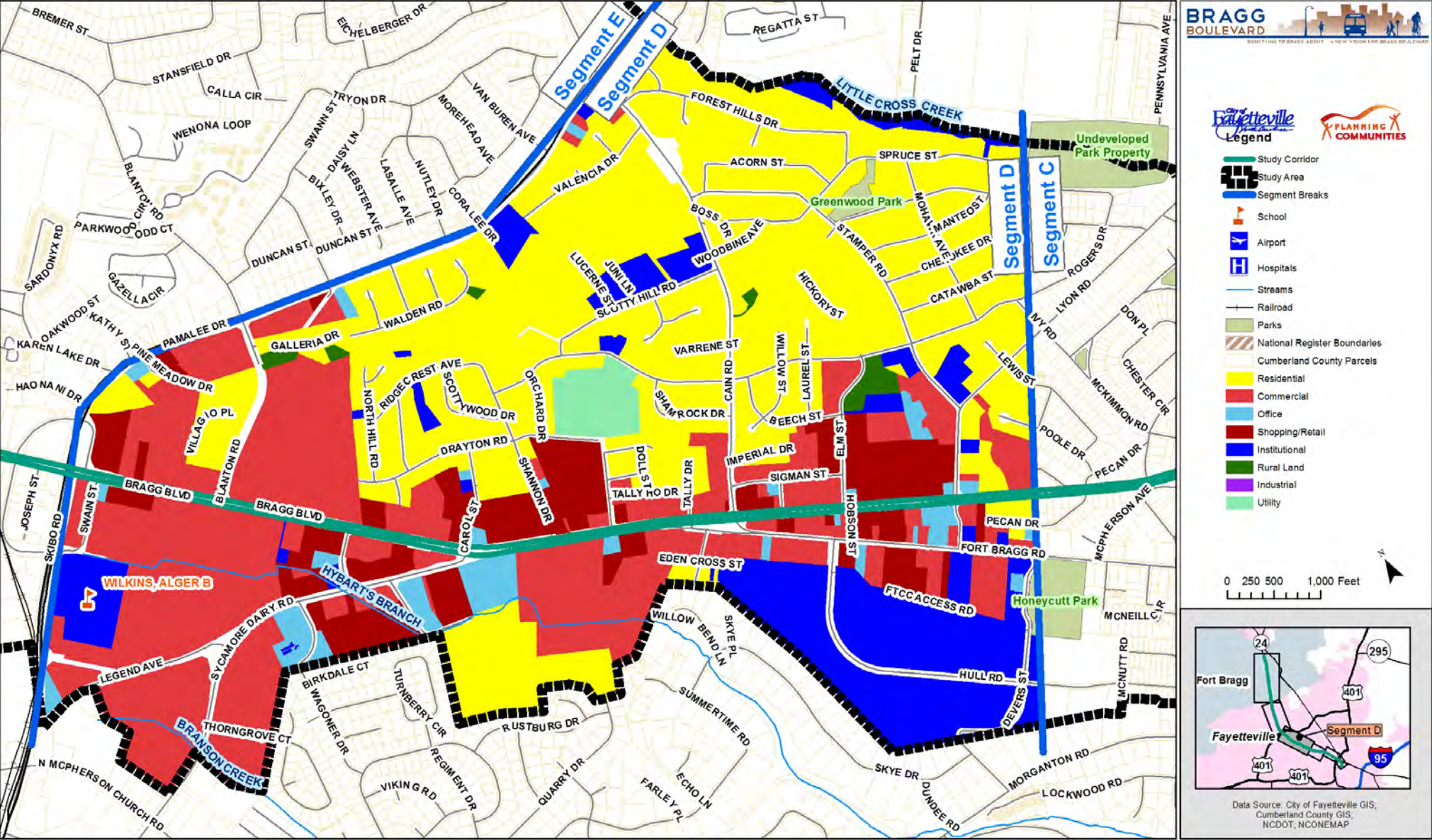
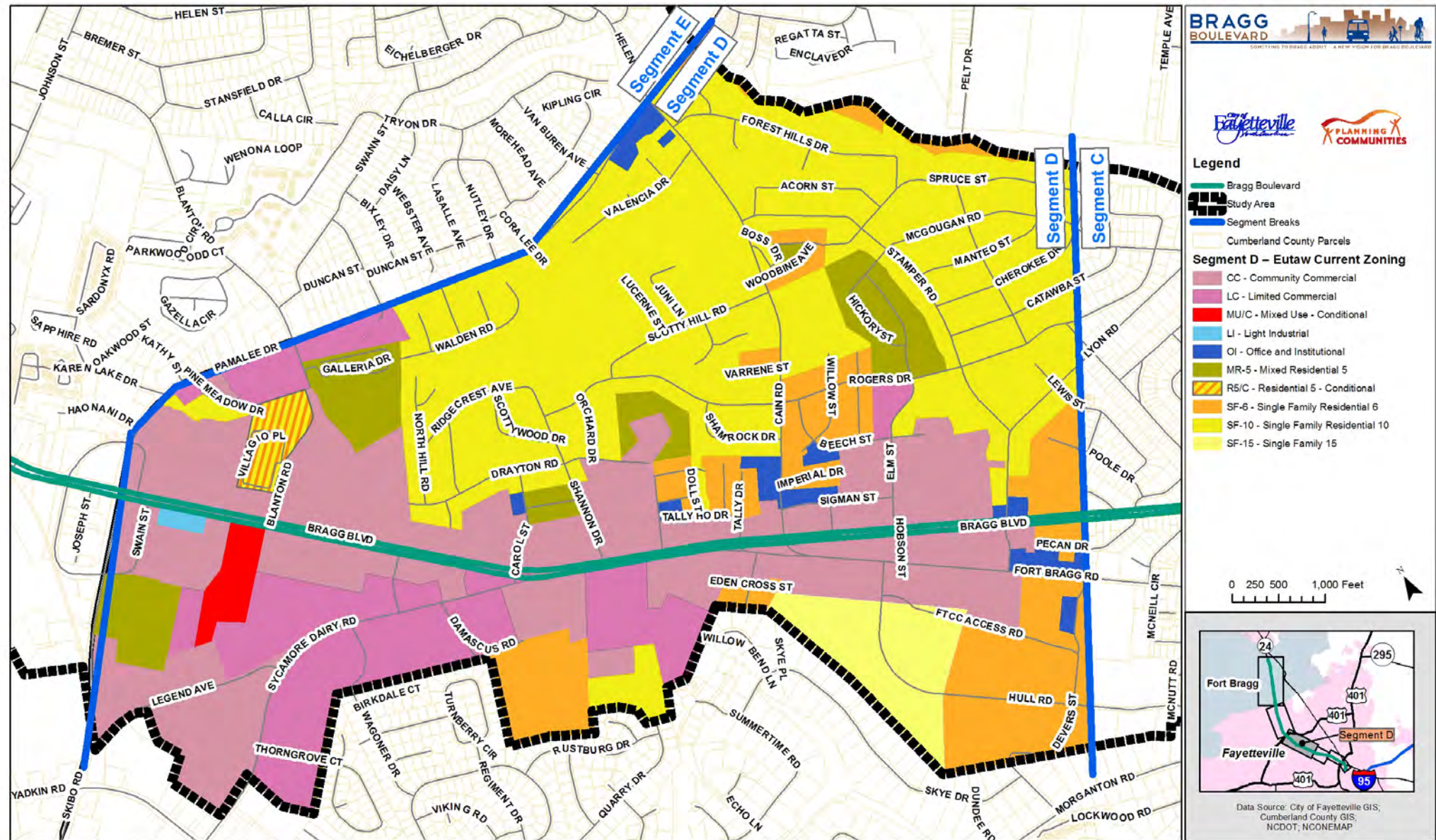




Figure 3-18: Segment D- Eutaw- Current Zoning





Demographic Highlights

The total population of Segment D is 5,964. In this portion of the study area, just under 50 percent of the population describe themselves as white alone and just over one-third describe themselves as black or African American. Educational attainment data indicate that 26.8 percent hold a high school diploma and 19 percent have earned a Bachelor’s degree. Only ten percent of the population over age 25 has not graduated from high school. Demographic highlights for Segment D are presented in Table 3-15.

Table 3-15: Segment D Demographic Profile

Population	Number of Persons	Percent of Total
Total population	5,964	-
Age	Number of Persons	Percent of Total
Under 18	1,333	22.4%
18-64	3,811	63.9%
65 and over	820	13.7%
Race	Number of Persons	Percent of Total
White alone	2,897	48.6%
Black or African American alone	2,133	35.8%
Indian or Alaska Native alone	9	0.2%
Asian alone	314	5.3%
Hawaiian or Pacific Islander alone	0	0.0%
Some other race alone	260	4.4%
Two or more races	351	5.9%
Ethnicity	Number of Persons	Percent of Total
Hispanic or Latino	632	10.6%
Not Hispanic or Latino	5,332	89.4%
Limited English Proficiency of Population Over 5	Number of Persons	Percent of Total
Population that speaks English less than “very well” (all languages)	326	5.9%
Educational Attainment of Population Over 25	Number of Persons	Percent of Total
Less than high school	400	10.0%
High school graduate/equivalency	1,071	26.8%
Some college	1,269	31.8%
Bachelor’s degree	759	19.0%
Master’s degree	302	7.6%
Professional school degree	158	4.0%
Doctorate degree	37	0.9%

Economic Characteristics

As previously described, Segment D contains a wide range of retail uses primarily in the form of strip development. Fayetteville Technical Community College is a significant economic driver.

Segment D has a median household income of \$44,330. Income is fairly evenly distributed; similar percentages of households fall within each income range, although slightly more are in the lower income brackets. Approximately 20 percent of the population lives below the poverty line and 7.7 percent are classified as “very poor” (below 50 percent of poverty level). The distribution of housing units is roughly equal between owner-occupied and renter-occupied status. Select socio-economic characteristics for Segment D are presented in Table 3-16.

Table 3-16: Segment D Socio-Economic Profile

Income	Number of Households	Percent of Total
Less than \$15,000	478	19.2%
\$15,000 to \$29,999	482	19.3%
\$30,000 to \$49,999	370	14.8%
\$50,000 to \$74,999	421	16.9%
\$75,000 to \$149,000	460	18.4%
\$150,000 or more	285	11.4%
Poverty	Number of Persons	Percent of Total
Below poverty level	1,188	20.8%
Below 50 percent of poverty level	428	7.5%
Between 100 and 150 percent of poverty level	438	7.7%
Housing Tenure	Number of Units	Percent of Total
Owner occupied housing units	1,226	49.1%
Renter occupied housing units	1,270	50.9%

*Summary of Physical, Natural, Cultural, and Community Resources*

While much of Segment D is developed, the eastern portion of the segment contains some vacant and primarily undevelopable land along Little Cross Creek and its tributaries. These areas are currently classified as residential, but include the natural water feature of Clarks Pond, which is south of Valencia Drive and just west of Cain Road. The eastern boundary of Segment D is formed by Little Cross Creek.

This portion of the study area contains a number of other cultural and community resources including churches, health and education facilities, entertainment centers, gathering places, and buildings of architectural significance. These resources are listed and briefly described below and displayed in Figure 3-19.

*Schools and Universities*

- Fayetteville Technical Community College (FTCC). Established in 1961, this institution is now the fourth largest community college in North Carolina—with a student population of 10,000—and has the largest continuing education program in the state.
- Alger B. Wilkins Elementary School is located west of Bragg Boulevard directly south of Skibo Road, in the northwestern limit of Segment D.

*Churches/Religious Institutions*

- Glory’s Light Deliverance Ministry
- Korean Catholic Community Church
- Cornerstone Baptist Church

*Gathering Places and Entertainment Centers*

- The Bragg Boulevard Flea Market Plaza, which also contains a farmers market and serves as a gathering place for community members
- Bowling alley
- Skating center
- Movie theatre

*Medical Resources*

- Haymount Rehabilitation and Nursing Center
- Raintree Clinic (substance abuse)

*Buildings of Architectural Significance*

- Eutaw Village – one of the earliest shopping centers circa 1950s; currently in good repair and in use as a shopping center
- 3901 Bragg Boulevard – old gas station; currently serves an automobile use and is in relative disrepair





**Fayetteville**  
BRAGG BOULEVARD  
SOMETHING TO BEHOLD ABOUT IT - A NEW VISION FOR BRAGG BOULEVARD

**Legend**

- Study Corridor
- Study Area
- Segment Breaks
- School
- Airport
- Hospitals
- Streams
- Railroad
- Parks
- Buildings of Architectural Significance
- National Register Boundaries
- Cumberland County Parcels

**Civic/Cultural Resources**

- Church
- Civic
- Health Care
- Museum

0 250 500 1,000 Feet

Fort Bragg  
Fayetteville  
Segment D  
24  
295  
401  
95

Data Source: City of Fayetteville GIS,  
Cumberland County GIS,  
NCDOT, NCONMAP



Segment E Profile: Bonnie Doone

Segment E is located between Pamalee Drive and the southeastern perimeter of Fort Bragg, just south of the Knox Access Control Point (ACP). The northern boundary is the future I-295 Corridor. The Bonnie Doone segment is the longest of the six identified segments, with a mix of lower-density commercial uses, primarily retail and industrial. Parcels are larger along this segment, with many of them only partially developed. Key characteristics of this segment are summarized below.

Land Use

Segment E contains a mixture of residential, retail, institutional, recreational, rural, and utility uses. The distribution of land by type of use is shown in the chart to the right, and land use and zoning maps are shown in Figures 3-20 and 3-21.

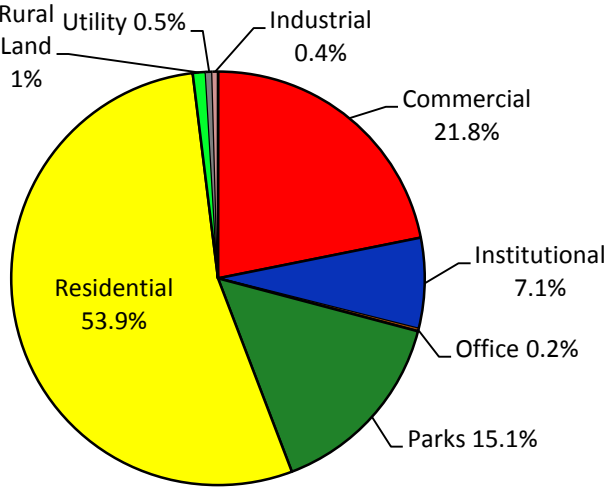


The most common land uses in Segment of E are residential, retail, and parks. The majority of housing in Segment E is located northeast of Bragg Boulevard. A variety of housing types are present, including single-family detached residences, mobile home communities and apartment complexes. Apartment complexes in the area include Blanton, Barner and Fairlane Apartments. Mobile home communities are located throughout the segment along Shaw Road and Blanton Road.



Commercial uses in Segment E are primarily in the form of strip retail development. Types of establishments vary widely, from pawnshops to beauty salons, bars, and restaurants. There are a number of automobile-oriented uses, including new and used car dealerships and auto repair shops. The majority of retail development is spread along the corridor with limited connectivity. Bragg Boulevard and Pamalee Drive serve as major thoroughfares.

Park areas in Segment E include Kornbow and Bonnie Doone Lakes. Both are man-made lakes and control structures. Another water feature, Mintz Pond, is located on Pamalee Drive near Helen Street. The Roy G. Turner Park is located on Blanton Road. Institutional uses include Lewis Head Start, Bal Perazim Christian Academy, and Our Redeemer Preschool. There are also a number of churches, including Bonnie Doone Baptist Church, Mt. Olive Missionary Baptist Church, Antioch Church of God, and Cornerstone Ministries.



Segment E is home to the Military Business Park off Santa Fe Drive near the All American Freeway. The business park is located on over 200 acres and can accommodate up to 1.5 million square feet of office space.

Development Patterns/Trends

Development in Segment E is oriented to the automobile. Uses are fairly evenly distributed along Bragg Boulevard with no organized center and very limited connectivity.

Figure 3-20: Segment E – Bonnie Doone – Current Land Use

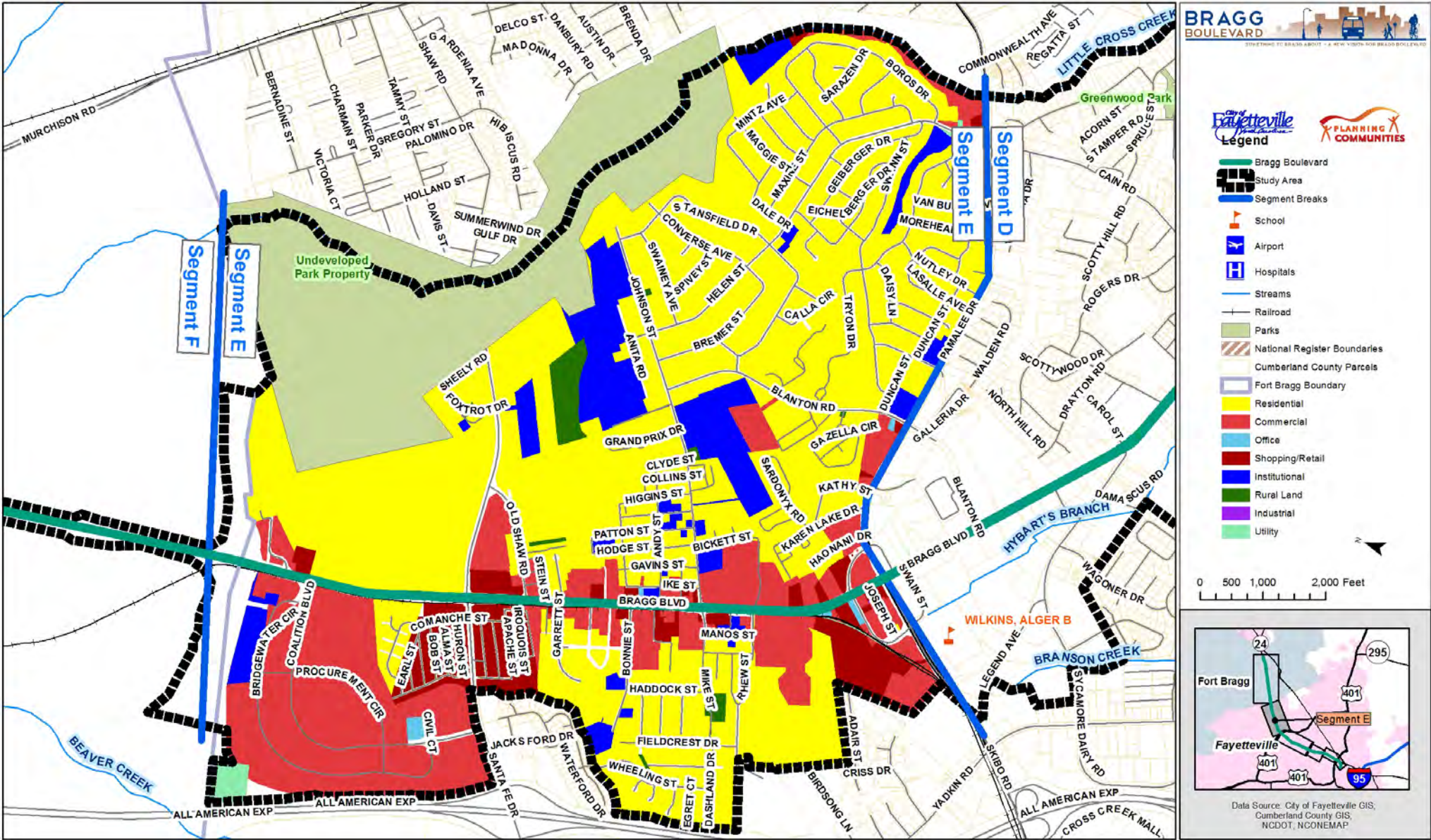




Figure 3-21: Segment E – Bonnie Doone – Current Zoning

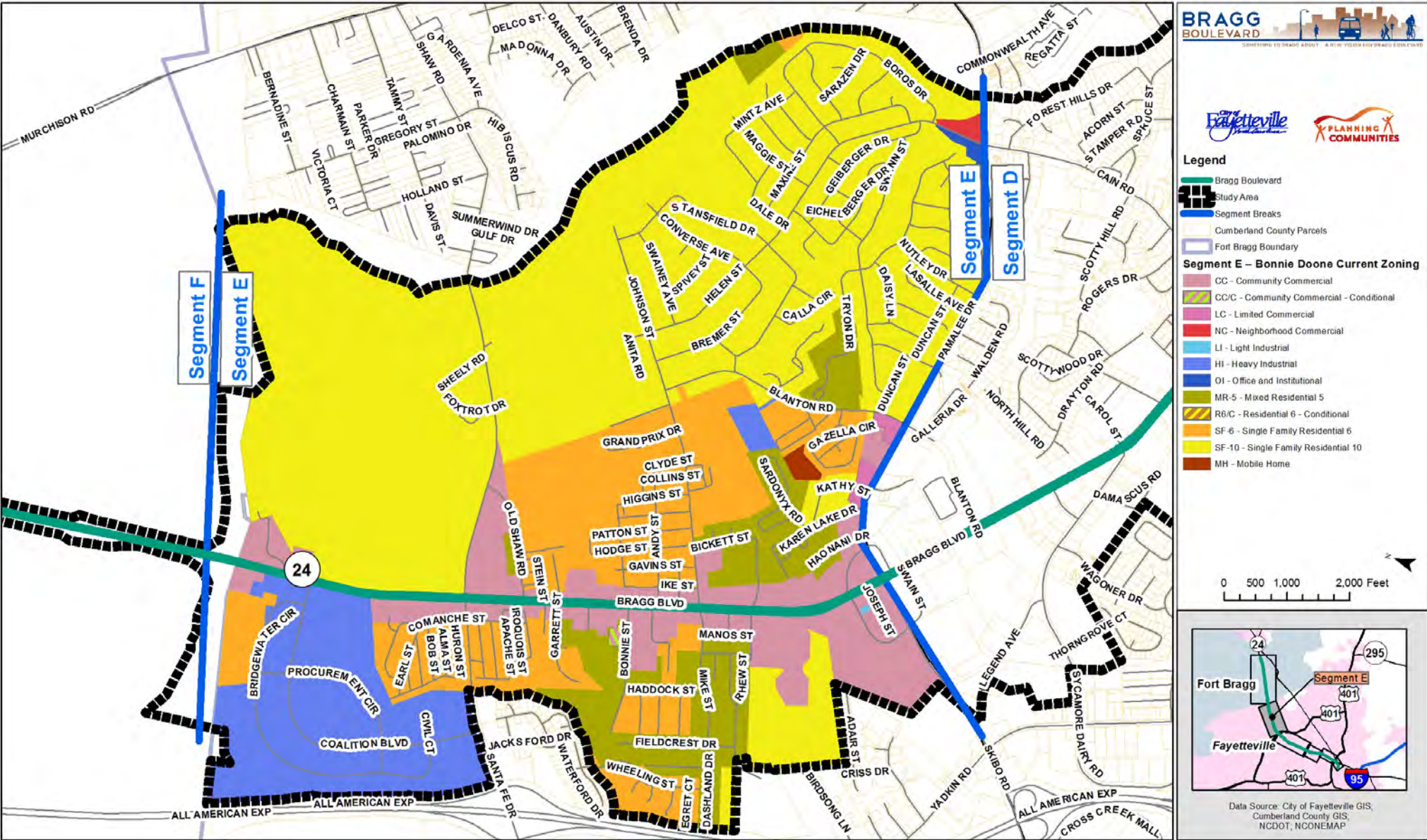


Table 3-17: Segment E Demographic Profile

Population	Number of Persons	Percent of Total
Total population	8,589	-
Age	Number of Persons	Percent of Total
Under 18	2,350	27.4%
18-64	5,640	65.7%
65 and over	599	7.0%
Race	Number of Persons	Percent of Total
White alone	3,084	35.9%
Black or African American alone	4,111	47.9%
Indian or Alaska Native alone	130	1.5%
Asian alone	152	1.8%
Hawaiian or Pacific Islander alone	0	0.0%
Some other race alone	471	5.5%
Two or more races	641	7.5%
Ethnicity	Number of Persons	Percent of Total
Hispanic or Latino	994	11.6%
Not Hispanic or Latino	7,595	88.4%
Limited English Proficiency of Population Over 5	Number of Persons	Percent of Total
Population that speaks English less than “very well” (all languages)	363	4.7%
Educational Attainment of Population Over 25	Number of Persons	Percent of Total
Less than high school	1,091	20.7%
High school graduate/equivalency	1,504	28.5%
Some college	1,806	34.3%
Bachelor’s degree	617	11.7%
Master’s degree	199	3.8%
Professional school degree	14	0.3%
Doctorate degree	37	0.7%

Demographic Highlights

The total population of Segment D is 8,589. In this portion of the study area, 47.9 percent of the population describe themselves as Black or African American alone and just over one-third describe themselves as White alone. Educational attainment is low in comparison with other study segments, with 20.7 percent not holding a high school diploma and only 16.5 percent earning a Bachelor’s degree or higher. Demographic highlights for Segment E are presented in Table 3-17.

Economic Characteristics

As previously described, Segment E contains a wide range of retail uses primarily in the form of strip development. Sam’s Club is one of the larger retail stores in Segment E and is located at Bragg Boulevard and Skibo Road. In addition, there are various auto retailers located along Bragg Boulevard in this segment.

Segment E has a relatively low median household income of \$28,564. Approximately 27 percent of the population lives below the poverty line and 9.1 percent are classified as “very poor” (below 50 percent of poverty level). The proportion of renter-occupied housing units is slightly higher than that of owner-occupied units. Select socio-economic characteristics for Segment D are presented in Table 3-18.

Table 3-18: Segment E Socio-Economic Profile

Income	Number of Households	Percent of Total
Less than \$15,000	835	22.7%
\$15,000 to \$29,999	1,084	29.5%
\$30,000 to \$49,999	644	17.5%
\$50,000 to \$74,999	563	15.3%
\$75,000 to \$149,000	483	13.2%
\$150,000 or more	63	1.7%
Poverty	Number of Persons	Percent of Total
Below poverty level	2,315	27.1%
Below 50 percent of poverty level	780	9.1%
Between 100 and 150 percent of poverty level	1,089	12.8%
Housing Tenure	Number of Units	Percent of Total
Owner occupied housing units	1,515	41.3%
Renter occupied housing units	2,157	58.7%



*Summary of Physical, Natural, Cultural, and Community Resources*

The northeast section of Segment E contains a large amount of undeveloped future park property. The Public Works Commission owns this tract of land and there are plans to develop it as a park to serve the surrounding areas and ties into the Fayetteville Greenway system. Existing park areas include Kornbow and Bonnie Doone Lakes. Little Cross Creek traverses the parkland, forming the northeast boundary. The majority of undeveloped land is located on both sides of Shaw Road, east of Bragg Boulevard.

This portion of the study area contains several community resources, including churches, health facilities, entertainment centers, and shopping areas. These resources are listed below and displayed in Figure 3-22.

Churches/Religious Institutions

- Bonnie Doone Baptist Church
- Mt. Olive Missionary Baptist Church
- Antioch Church of God
- Cornerstone Ministries
- Bal Perazim Church
- Fayetteville Advent Christian
- Gethsemane Baptist Church
- House of Prayer Christian Church
- My Father’s House Christian

Adult Entertainment Centers

- Victoria’s Cabaret Bar
- Legend’s Pub
- Mickey’s Gentleman’s Club

Medical Resources

- Westside Medical Care, operated by Cape Fear Valley Health

Schools

- Lewis Head Start
- Bal Perazim Christian Academy
- Our Redeemer Preschool

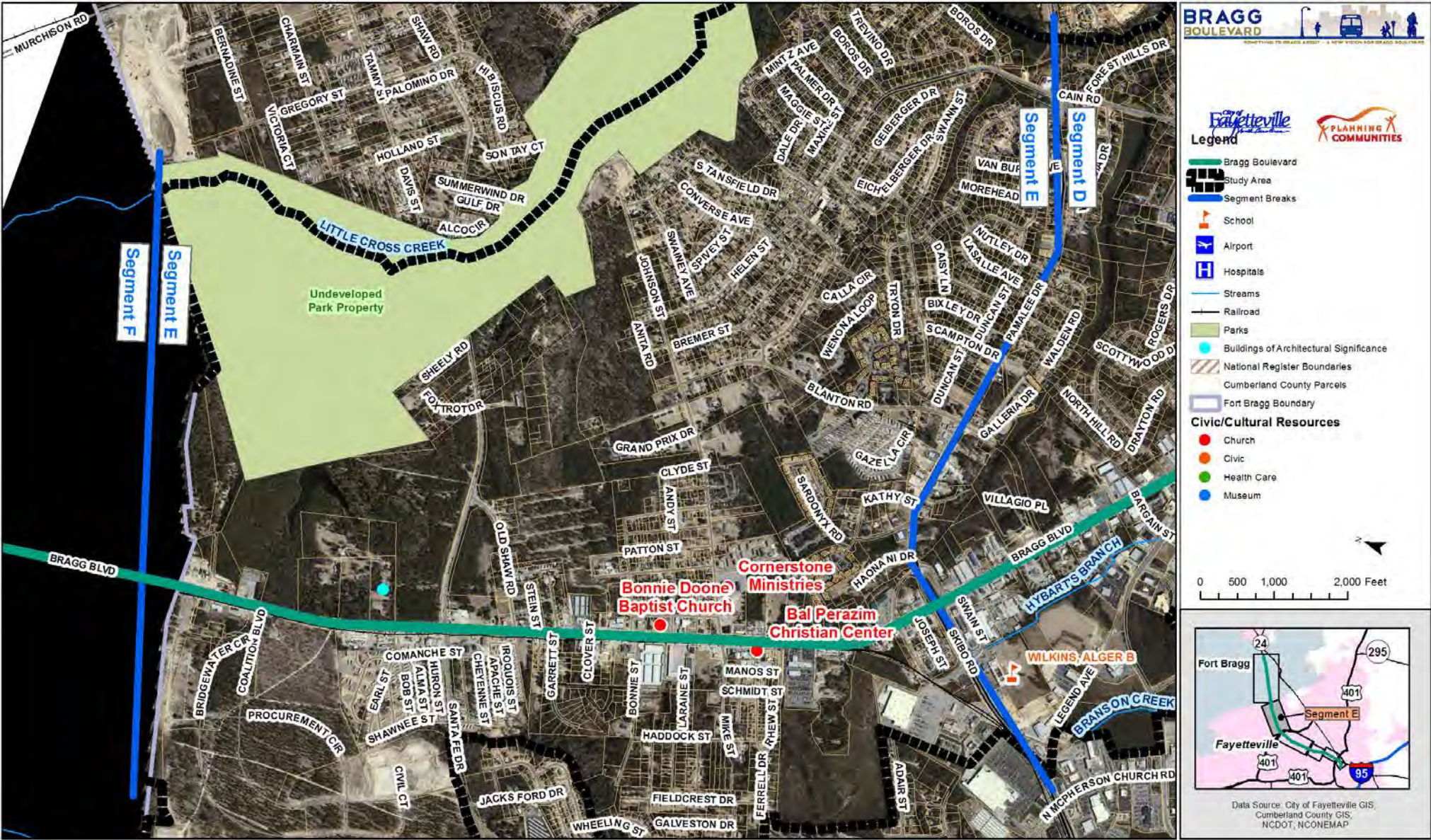
Buildings of Architectural Significance

- 5900 Bragg Boulevard (corner of Bragg Boulevard and Shaw Road) – large wooded site with historic Buena Vista house circa 1840s





Table 3-22: Segment E - Haymount - Civic/Cultural Resources





Segment F Profile: Fort Bragg

Segment F is the northernmost segment of the study area, extending from the southeastern perimeter of Fort Bragg (just south of the Knox Access Control Point) to the intersection with Randolph Street. This segment is entirely within Fort Bragg, and the surrounding area therefore contains military training facilities, offices, and housing for military personnel and families. The study area in Segment F contains only Bragg Boulevard and does not extend beyond the roadway, as the City of Fayetteville does not have land use authority within the military base. However, improvement recommendations specific to the roadway will be made to serve this key part of the study area.

Future Conditions

The following sections provide insights into the demographic and economic conditions along Bragg Boulevard more than 20 years from now. Population and employment forecasts obtained from the Fayetteville Area Metropolitan Planning Organization (FAMPO) are converted to potential “on-the-ground” residential and commercial development by Traffic Analysis Zone (TAZ). Figure B2 (Appendix B) illustrates the boundaries of the TAZs that encompass the study area. TAZs north of the future I-295, or those that encompass the Fort Bragg installation portion of Bragg Boulevard, were not included in this analysis since land development forecasts are not applicable for this area.

Table 3-19: High Population Growth (TAZ)

Study Area TAZ	Population		Change	
	2006	2035	#	%
73	97	354	257	72.6%
7	94	175	81	46.3%
74	1,379	2,328	949	40.8%
48	608	983	375	38.1%
75	1,998	3,202	1,204	37.6%
12	38	53	15	28.3%
All Other TAZs	17,424	19,549	2,125	12.2%
Total	21,638	26,644	5,006	23.1%

Source: FAMPO Model

Population Growth

Based on FAMPO regional model forecasts by Traffic Analysis Zone, population within the Study Area TAZs is expected to increase by 23.1 percent from 21,638 in 2006 to 26,644 by 2035 (Table 3-19). TAZs that are forecasted to increase by more than 25 percent are included in Table 3-19. In terms of percent growth, TAZ 73, which is located immediately north of Skibo Road and west of Bragg Boulevard, is anticipated to grow at the highest rate (72.6 percent), primarily because of the amount of available residential land. The same is true for TAZ 7, although at a much smaller scale (81 people).

With a forecasted population increase of 949 people at a rate of 40.8 percent, TAZ 74, located in the northeast quadrant of Bragg Boulevard and Skibo Road, has the potential to add the most population not already within a subdivision. When combined with TAZ 73, the potential of adding about 1,200 people on both sides of Bragg Boulevard just north of Skibo Road is worth noting, particularly since this population could be housed in transit-supportive mixed use development or higher-density housing. TAZ 75 population growth between 2006 and 2035 would primarily be on undeveloped lots within the already established Green Valley Estates subdivision which backs up to the Kornbow Lake area on the east side of Bragg Boulevard north of Pamalee Drive.

Cumberland County population is forecasted to increase by nearly 80,000 residents between 2010 and 2030, or a growth rate of 25 percent (Table 3-20). This growth rate is higher than that of the Study Area TAZs (23.5 percent) in slightly less time (20 years compared to almost 30 years). This is not surprising

Table 3-20: Cumberland County Population Forecast (2010-2030)

Geography	Population			Change, 10-30	
	2010	2020	2030	#	%
Cumberland County	319,431	376,645	399,224	79,793	25.0%

Source: NC State Office of Budget and Management

Table 3-21: High Employment Growth TAZs, Study Area

Study Area TAZ	Employment		Change	
	2006	2035	#	%
89	20	210	190	90.5%
98	49	174	125	71.8%
65	575	1,100	525	47.7%
67	744	1,419	675	47.6%
90	141	221	80	36.2%
91	189	289	100	34.6%
43	626	851	225	26.4%
All Other TAZs	9,312	9,692	380	4.1%
Total	11,656	13,956	2,300	19.7%

Source: FAMPO Model

Table 3-23: High Housing Unit Growth TAZs, Study Area

Study Area TAZ	Housing Units		Change	
	2006	2035	#	%
73	51	187	136	72.6%
48	243	536	292	54.6%
7	62	116	53	46.2%
74	706	1,191	486	40.8%
75	876	1,403	528	37.6%
12	18	24	7	27.3%
All Other TAZs	8,673	9,691	1,018	11.7%
Total	10,629	13,148	2,519	23.7%

Source: FAMPO Model

considering that residential growth in the study area would be more in-fill development and redevelopment than new, greenfield site development on less expensive land.

Employment Growth

Based on FAMPO model data, overall employment growth within the Study Area TAZs between 2006 and 2035 equates to 2,300 jobs, or an increase of 19.7 percent (Table 3-21). This growth rate is less than that of population (23.5 percent) during the same time period. In 2006, there were a total of 11,656 jobs located within the Study Area TAZs. This amount was only slightly more than half that of residents, equating to a population to jobs ratio of 1.82. This ratio is expected to increase to 1.87 by 2035, when employment within Study Area TAZs increases to 13,956.

The highest percent growth in jobs is expected to take place within areas closer to Fort Bragg, as the transportation network continues to improve and Fort Bragg continues to maintain a major presence. Both TAZ 89 and TAZ 98, which exhibit the highest percentage growth in jobs, are located in the southeast and southwest quadrants of I-295 and Bragg Boulevard, respectively. In terms of the number of jobs, the largest concentrations of employment will be in TAZ 67, located west of Bragg Boulevard along the south side of Skibo Road, and TAZ 65, encompassing both sides of Bragg Boulevard between Skibo Road and Sycamore Dairy Road.

Residential Forecast

In addition to the population forecast, the FAMPO model included a household forecast based on local and regional trends in the average household size. A total of 11,833 households are anticipated within the Study Area TAZs in 2035, representing a growth rate of 23.7 percent, slightly higher than the population forecast growth rate (indication of smaller household sizes). Table 3-22 indicates the highest household growth rate TAZs in the study area. The highest household growth rates coincide with those in Table 3-19 for population with the exception of TAZ 48. This TAZ is expected to increase its households by 54.6 percent, but its population by only 38.1 percent during the 29-year period. This indicates a decreasing household size and higher density housing for this TAZ, which is located on the west side of Bragg Boulevard between Westmont Drive and Pilot Avenue in the Lafayette Heights neighborhood.

Based on 2010 occupancy rates obtained from the US Census Bureau, the number of households, or occupied housing units, were converted to total housing units, which includes an estimate of vacant housing units and provides an indication of the demand for the future acreage needed to accommodate overall residential development. These statistics were proportional to the household forecasts by TAZ, as a 90

Table 3-22: High Household Growth TAZs, Study Area

Study Area TAZ	Households		Change	
	2006	2035	#	%
73	46	168	122	72.6%
48	219	482	263	54.6%
7	56	104	48	46.2%
74	635	1,072	437	40.8%
75	788	1,263	475	37.6%
12	16	22	6	27.3%
All Other TAZs	7,806	8,722	916	11.7%
Total	9,566	11,833	2,267	23.7%

Source: FAMPO Model



percent occupancy rate was applied across the board. Table 3-23 indicates that 13,148 total housing units need to be accommodated for within the Study Area TAZs in 2035, according to the FAMPO model. This is an increase of 2,519 housing units from 2006, or an additional 23.7%.

**Commercial Forecast**

The overall employment forecast provided in Table 3-23 was broken down to provide an indication of the type of employment that the Study Area TAZs can expect to accommodate in 2035. Employment categories provided in the model were aggregated into three distinct categories: retail/services, office, and industrial. Not surprisingly, retail/services employment comprises the largest share of the commercial market along Bragg Boulevard, with 77 percent of total employment in 2006 (Table 3-24). By 2035, this share is forecasted to increase to 80.2 percent, indicating continued strength in the retail market. Office employment growth is limited during this period, and industrial employment is expected to remain unchanged. However, the completion of I-295 and the potential development of Military Business Park adjacent to the interstate may generate some demand for light industrial/flex space and professional office along the northern portion of Bragg Boulevard, particularly in the southeastern quadrant of I-295 and Bragg Boulevard as well as at the Shaw Road/Bragg Boulevard intersection.

**Developing/Potential Activity Nodes**

Based on the findings within the data analysis, there appear to be some opportunities along Bragg Boulevard to create some higher-density, mixed-use activity nodes that could support a more pedestrian-friendly environment and potentially transit-oriented development. As is currently the case, Segment C – Eutaw, which extends from Barrington Cross Street to Pamalee Drive, contains the most economic activity along the entire corridor. However, the development pattern remains strip in nature, and completely dependent upon vehicular access. There is, however, some potential for complementary activity within this segment between the Eutaw Village shopping center and the Fayetteville Technical Community College, which is located across Bragg Boulevard and Fort Bragg Road. Strengthened multi-modal connections between these two destinations would be a critical step in the development of this activity node.

There is the potential to create three small, but high-density activity nodes along this segment, with uses between those nodes focused more on transitional uses such as light industrial, lower density commercial, and well-designed parks/open space. Well-designed surface and/or structured parking for destinations should be integrated within the nodes. These potential nodes are located at:

- Fort Bragg Road/Cain Road
- Sycamore Dairy Road
- Blanton Road Extension/Villagio Development

To the south, along Bragg Boulevard between Martin Luther King Jr. Freeway and Hay Street, a larger activity node could be developed that accommodates mixed-use structures in three- to four-story, street-lined buildings that could include retail, office, residential and civic uses. To the north, prior to arriving at Fort Bragg, the southwest and southeast quadrants of the I-295 and Bragg Boulevard interchange are suitable for a mix of commercial development types (i.e. office, industrial, retail) that support Fort Bragg operations and personnel. The Military Business Park is located within the southwest quadrant of this soon-to-be completed interchange, and the southeast quadrant has ample land available to create a regional office/retail destination that serves Fort Bragg and northern Fayetteville and Cumberland County. Uses would primarily be auto-oriented, but high-density residential could also be included to support commercial development.

**Table 3-24: Employment Forecast, Study Area**

Employment Category	Study Area TAZ Jobs		Growth	
	2006	2035	#	%
Retail/Services	8,997	11,197	2,200	24.5%
Office	1,745	1,845	100	5.7%
Industrial	914	914	0	0.0%
Total	11,656	13,956	2,300	19.7%

Source: FAMPO Model

**Tax Base Shifts**

The recommendations that are developed as part of the Bragg Boulevard Corridor Study will have tax base implications for the City of Fayetteville. Higher density commercial and residential uses designed in a more pedestrian-friendly manner with vehicular and non-vehicular connections to surrounding neighborhoods will lead to higher tax values and increased tax revenue.

**Table 3-25: Potential Change in Land Use Allocation, Study Area**

Type	Acres		Change	
	Existing	Future	#	%
Townhouses	35.1	100.0	64.9	184.9%
Condominiums	48.9	100.0	51.1	104.5%
Office	67.0	125.0	58.0	86.6%
Hotel	20.4	35.0	14.6	71.6%
Apartments	192.3	325.0	132.7	69.0%
Retail	579.1	805.0	225.9	39.0%
Industrial	60.0	80.0	20.0	33.3%
Institutional	384.9	500.0	115.1	29.9%
Single Family Detached	1,433.7	1,800.0	366.3	25.5%
Utilities	182.1	140.0	-42.1	-23.1%
Duplex, Triplex, Quadraplex	65.4	33.5	-31.9	-48.8%
Vacant	1,625.6	750.0	-875.6	-53.9%
Manufactured/Mobile Homes	132.4	40.0	-92.4	-69.8%
Unknown	6.6	0.0	-6.6	-100.0%
<b>Total</b>	<b>4,833.5</b>	<b>4,833.5</b>	<b>0.0</b>	<b>0.0%</b>

Source: Cumberland County, Planning Communities, LLC

By shifting the shares of land use types to a higher density, more transit-friendly environment, the City of Fayetteville could generate nearly \$440 million more tax revenue (42.2%) than it currently does from the study area. In proportion to the acreage percentage increases, the largest percent increases in tax revenue would come from townhouses, condominiums, offices, hotels, and apartments, all of which support a more dense development pattern along the corridor.

The study area’s commercial and residential tax base shares can remain the same. Residential uses will be needed to support businesses along the corridor as well as to make transit service more feasible. However, the distribution of the type of future uses should change, both for residential and commercial inventories.

Table 3-25 shows one potential change in the distribution of land uses within the study area that supports higher density, mixed-use and transit supportive development in strategic locations along the corridor. Please note that future land use scenarios that are developed as part of Task 3 of this plan will be validated by market data and local developer input. The vacant share of study area land use has been reduced to more than half that of the current total, with all other land use acreage increasing except for utilities, manufactured/mobile homes, duplex/triplex/quadraplex, and unknown. The largest acreage percentage increases were in townhouses, condominiums, offices, hotels, and apartments. These uses are typically more conducive to a mixed-use, nodal development pattern, better suited to support potential transit services, and generate higher tax revenue per acre than other uses. Without increasing the existing value per acre amounts for the various land uses, Table 3-26 shows existing and potential future tax values by land use type due to the acreage adjustments in Table 3-25. The total tax value per acre for each use (see Table 3-8 under the Tax Base section) was multiplied by the existing and future acreage for each use (see Table 3-25) to obtain the existing and future tax value by use.

**Table 3-26: Potential Change in Tax Values, Study Area**

Type	2006 Tax Value	2035 Tax Value	#	%
Townhouses	\$43,537,928	\$124,216,600	\$80,678,672	185.3%
Condominiums	\$45,499,201	\$93,045,400	\$47,546,199	104.5%
Office	\$54,722,583	\$102,394,372	\$47,671,789	87.1%
Hotel	\$38,512,521	\$66,075,404	\$27,562,883	71.6%
Apartments	\$93,279,756	\$157,649,094	\$64,369,338	69.0%
Retail	\$249,625,625	\$365,464,582	\$115,838,957	46.4%
Industrial	\$10,405,969	\$13,874,625	\$3,468,656	33.3%
Single Family Detached	\$479,929,051	\$544,371,310	\$64,442,259	13.4%
Duplex, Triplex, Quadraplex	\$25,156,440	\$12,885,944	-\$12,270,496	-48.8%
<b>Total</b>	<b>\$1,040,669,074</b>	<b>\$1,479,977,331</b>	<b>\$439,308,257</b>	<b>42.2%</b>

Source: Cumberland County

## 4.0 ACCESS AND TRANSPORTATION

The nature and character of existing transportation conditions along the Bragg Boulevard corridor, study area physical and operating conditions are identified and described in this section. A physical description of the street is presented from the state, regional, and local perspectives. Operating conditions for the years 2010 and 2035 are presented.

### Existing Bragg Boulevard

Bragg Boulevard supports a variety of functions. The retail, service, and entertainment-related businesses create employment opportunities and serve adjacent residential neighborhoods, Fort Bragg, and other Fayetteville residents. Bragg Boulevard also serves an important traffic function, providing mobility for short and long trips by motor vehicle. It is part of a statewide network of Strategic Highway Corridors designed to provide high-speed mobility for motor vehicles. Currently, Bragg Boulevard offers limited support for safe pedestrian and bicycle travel, and there is minimal transit service along the corridor between downtown Fayetteville – the heart of the region – and Fort Bragg – the economic engine of the region.

Bragg Boulevard is characterized by rolling terrain in Sections A and B, and levels out north of McPherson Road. It is a multi-lane major street. There are six travel lanes on Bragg Boulevard south of where the I-295 interchange is now under construction. To the north of I-295 there are four travel lanes. Exclusive left and right-turn lanes are provided in numerous locations along Bragg Boulevard. None of the travel lanes are wide enough to safely accommodate bicycle travel. Sidewalks are provided along portions of Bragg Boulevard; however, significant gaps in the sidewalk connectivity exist. (See Figures 4-1A through 4-1F.) A raised median is present in most of the study area, except a one-mile long five-lane segment north of Martin Luther King Jr. Freeway. The median is landscaped for approximately 2.5 miles between Glenville Avenue and Skibo Road/Pamalee Drive. The landscaping is typically grass, bushes and in some places small trees; a metal guardrail runs the length of this segment except at key intersections. There is a large concrete median, without landscaping, between Blue Street and Walter Street in the vicinity of downtown Fayetteville. The most aesthetically pleasing median on Bragg Boulevard is in front of Veterans Park/Airborne and Special Operations Museum between Walters Street and Hay Street.



**BRAGG BOULEVARD**

**Fayetteville**

**PLANNING COMMUNITIES**

**Legend**

- Bragg Boulevard
- Study Area
- Segment Breaks
- Sidewalks
- School
- Railroads
- Streams
- Parks
- Cumberland County Parcels

0 250 500 1,000 Feet

Fort Bragg

Fayetteville

Segment A

Data Source: City of Fayetteville GIS, Cumberland County GIS, NCDOT, NCONMAP



Figure 4-1B: Segment B- Bragg Boulevard CBD- Current Sidewalks

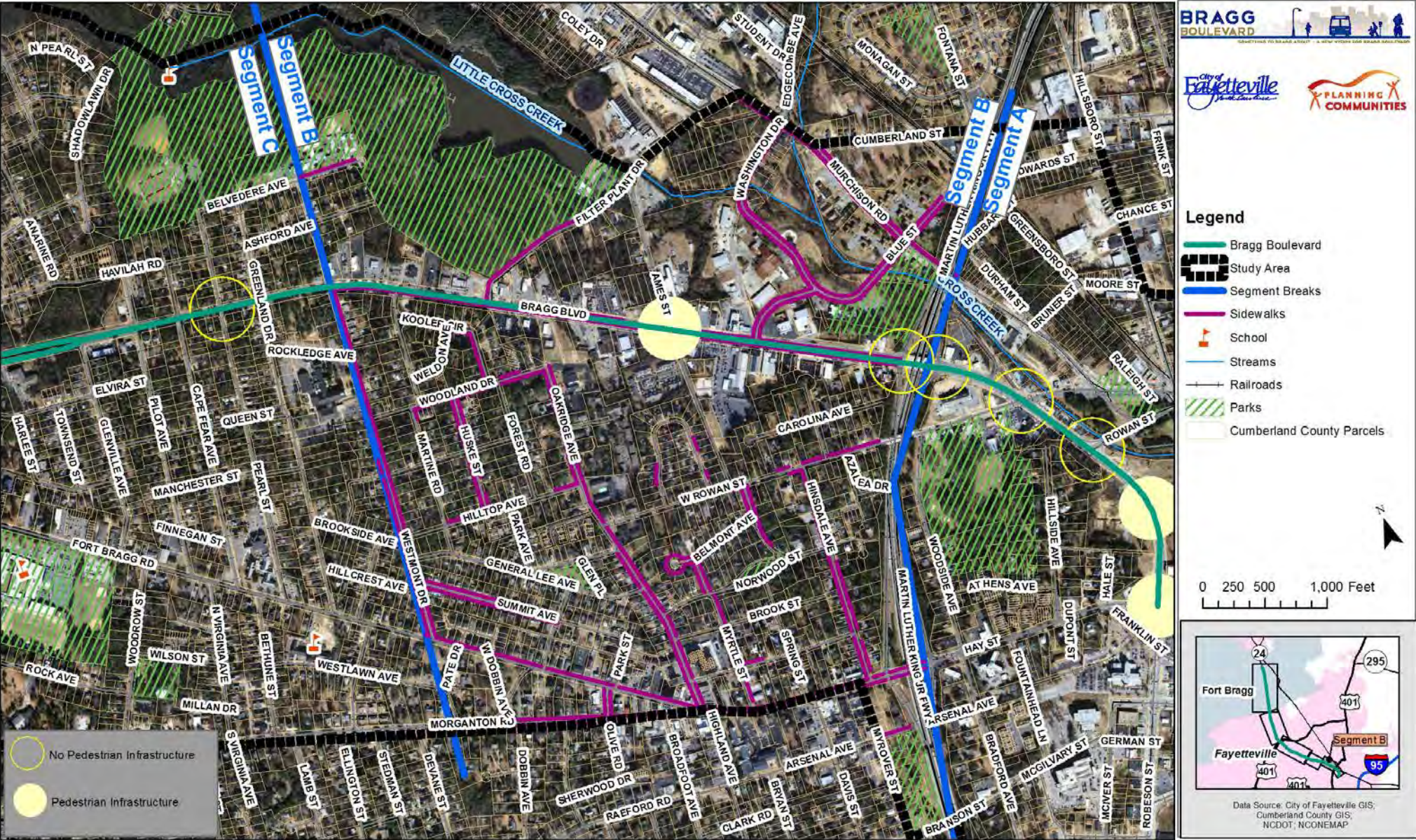




Figure 4-1C: Segment C- Haymount- Current Sidewalks

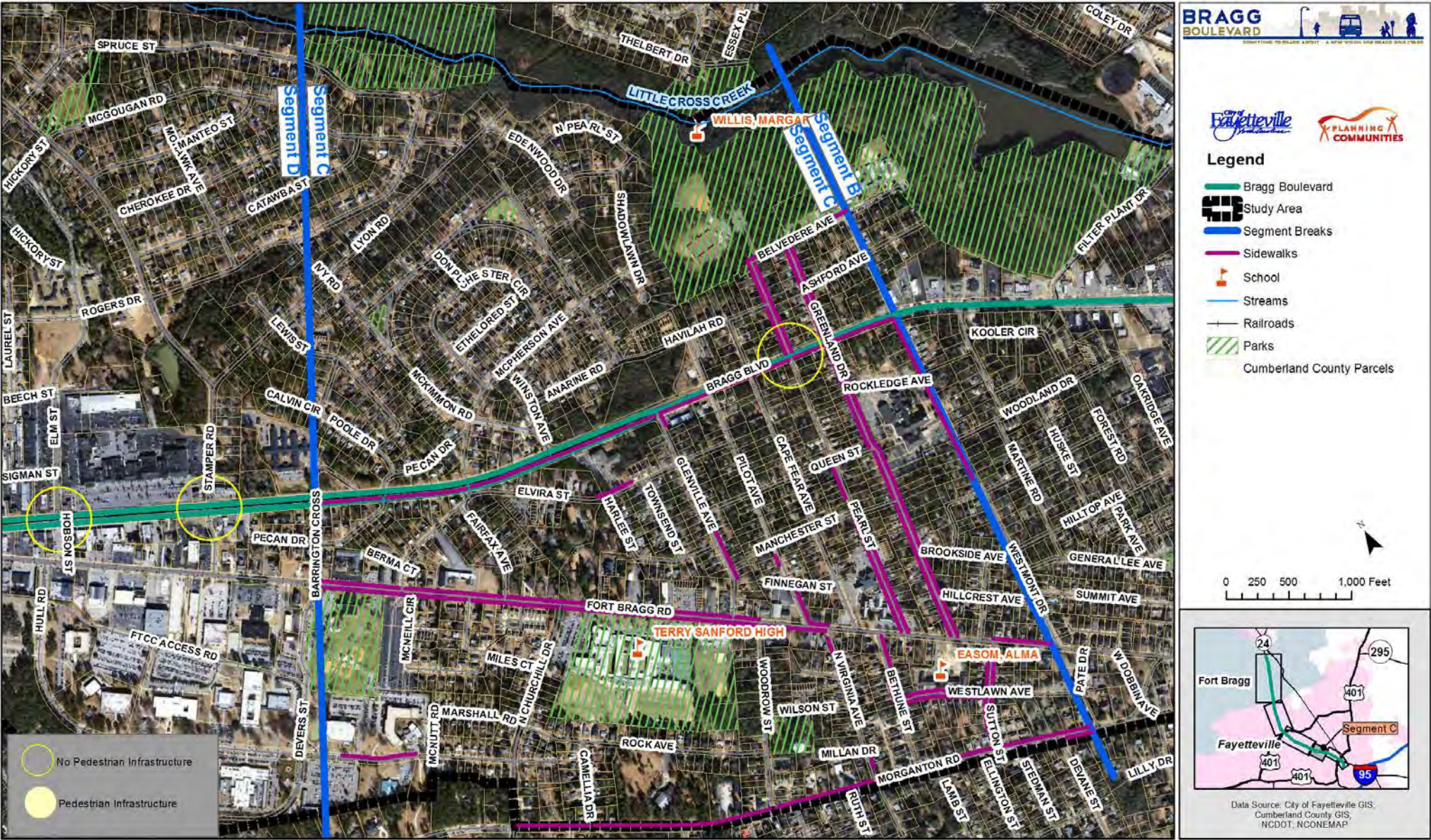
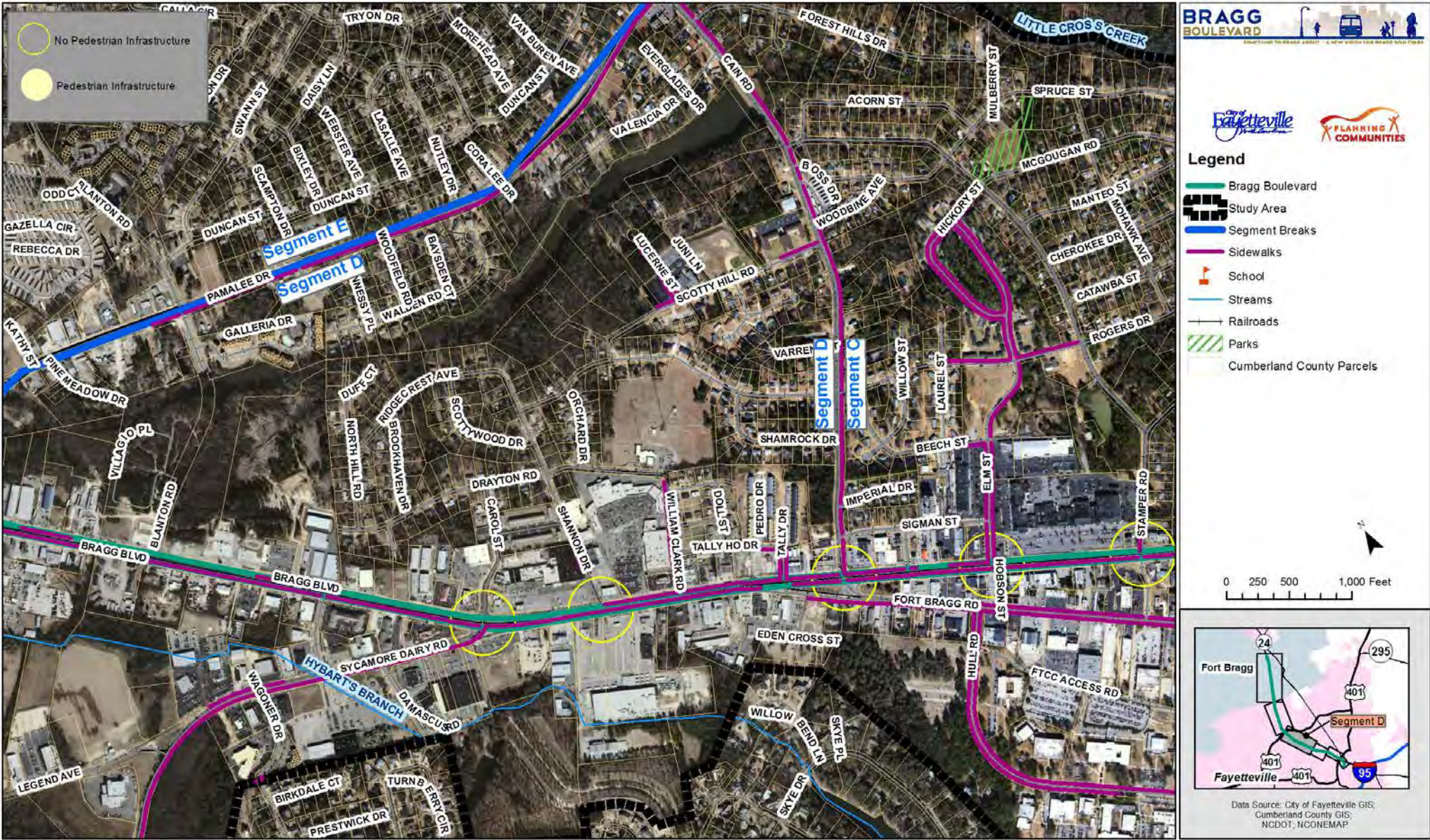




Figure 4-1D: Segment D- Eutaw- Current Sidewalks





**BRAGG BOULEVARD**  
SOMETHING TO BELIEVE ABOUT - A NEW VISION FOR BRAGG BOULEVARD

**Fayetteville**  
PLANNING COMMUNITIES

**Legend**

- Bragg Boulevard
- Study Area
- Segment Breaks
- Sidewalks
- School
- Streams
- Railroads
- Parks
- Cumberland County Parcels
- Fort Bragg Boundary

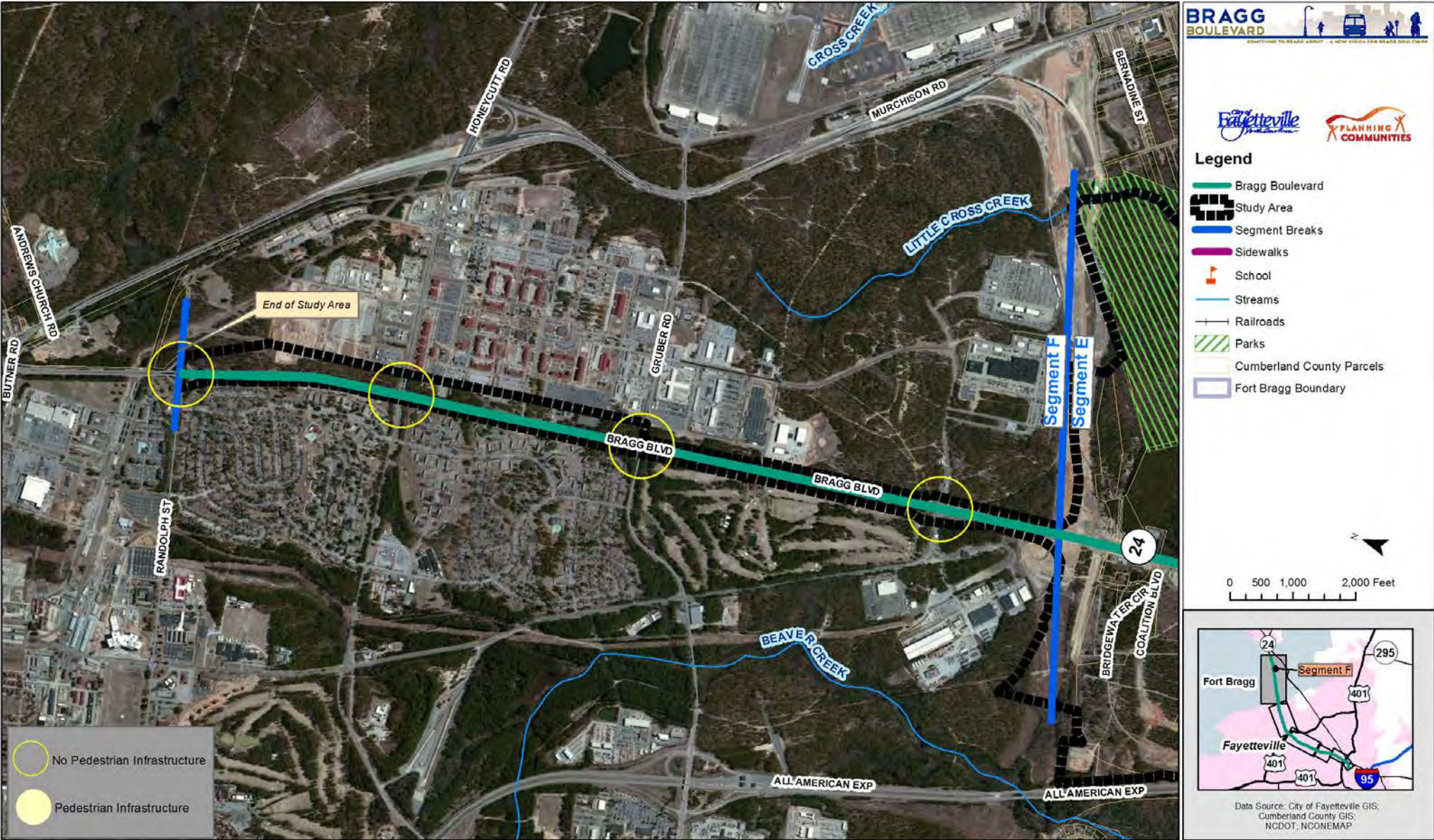
0 500 1,000 2,000 Feet

Fort Bragg  
Fayetteville  
24  
295  
401  
95

Data Source: City of Fayetteville GIS, Cumberland County GIS, NCDOT, NCONEMAP



Figure 4-1F: Segment F- Fort Bragg- Current Sidewalks



While the footprint of Bragg Boulevard (9.2 miles in length and 150 feet in typical right-of-way width) is relatively small at 165 acres, the corridor is of great importance to the region for a number of reasons including:

- Bragg Boulevard (at Fort Bragg Road) is at the geographical center of the region;
- It provides the shortest route between downtown Fayetteville and Fort Bragg;
- Bragg Boulevard is historic – it carries the name of the North Carolina native Braxton Bragg from whom Fort Bragg derives its name;
- It is the spine of a major street system that serves well-established and prominent neighborhoods, numerous commercial businesses and several important educational institutions in the region.

**State Strategic Highway Network**

Bragg Boulevard is part of the North Carolina Department of Transportation (NCDOT) road network, and is designated as NC Highways 24 and 87. The overlap of both highway designations extends from the Martin Luther King Jr. Freeway to Spout Springs in Harnett County.

NC Highway 24 connects Fayetteville with:

- Clinton and Jacksonville to the east
- Carthage, Albemarle and Charlotte to the west

NC Highway 87 connects Fayetteville with

- Sanford, Pittsboro and Burlington to the north
- Elizabethtown and Southport to the south

The study area is part of NCDOT Division 6. The Division Engineer is the senior executive with NCDOT in Fayetteville, with offices at 558 Gillespie Street.

In 2004, the North Carolina Board of Transportation designated a statewide network of highways called Strategic Highway Corridors. The objectives of the designation are listed below:

- enhance and preserve the backbone of the highway system in NC
- provide a network of high-speed, safe, reliable highways
- protect and maximize the mobility and connectivity on a core set of highway corridors
- enhance multi-jurisdictional corridor planning
- develop multi-party consensus on the desired facility type
- address consistency in a facility’s operation, access management, and safety



Bragg Boulevard is one of 55 strategic highway corridors in the State; the portion through Fort Bragg is part of Corridor 25 while the segment between Martin Luther King Jr. Freeway in Fayetteville and US 421 in Sanford is part of Corridor 40. The All-American Freeway is designated as a spur route. Bragg Boulevard’s designation as a Strategic Highway Corridor “expressway” could create future implications if expressway characteristics such as high-speed operation, consolidation or conversion of traffic signals to grade-separated interchanges and directional crossovers, and other actions to minimize conflicts with pedestrians and bicyclists were ever implemented. The closure of Bragg Boulevard within Fort Bragg will require an official review of the designation for Corridors 25 and 40.

**Regional Roadway Network**

Bragg Boulevard is one of many radial streets serving downtown Fayetteville and provides the most direct route to the southeastern perimeter of Fort Bragg. Other major streets and highways connecting Fort Bragg with downtown Fayetteville are the All-American Freeway/Morganton Road (to the west of Bragg Boulevard) and Murchison Road/NC 210 (to the east of Bragg Boulevard). These parallel streets and highways are approximately one to two miles from Bragg Boulevard.

When an incident occurs, other alternate routes between downtown and Fort Bragg include Ramsey Street/McArthur Road/Honeycutt Road and the Business 95/I-95/I-295 route. The travel time between downtown Fayetteville and Fort Bragg is comparable between all of these alternate routes, ranging from 15 to 30 minutes. The distance ranges from 9 to 12 miles along Bragg Boulevard and all of the alternate routes listed except Business 95/I-95/I-295, which is 18 miles between downtown and the Honeycutt Access Control Point (ACP) at Fort Bragg. A mid-day travel time test run as part of this study took 12 minutes to drive from the ACP at All American Freeway to downtown via Morganton Road which is several minutes faster than the travel time test run conducted on Bragg Boulevard.

The network of multi-lane streets in the study area and along alternate routes between downtown and Fort Bragg’s eastern and southeastern perimeter are shown in Figure 4-2. There are a total of 12 travel lanes in each direction connecting downtown and Fort Bragg’s eastern and southeastern perimeter. Bragg Boulevard provides 3 of these 12 directional lanes, or 25 percent of the roadway capacity.

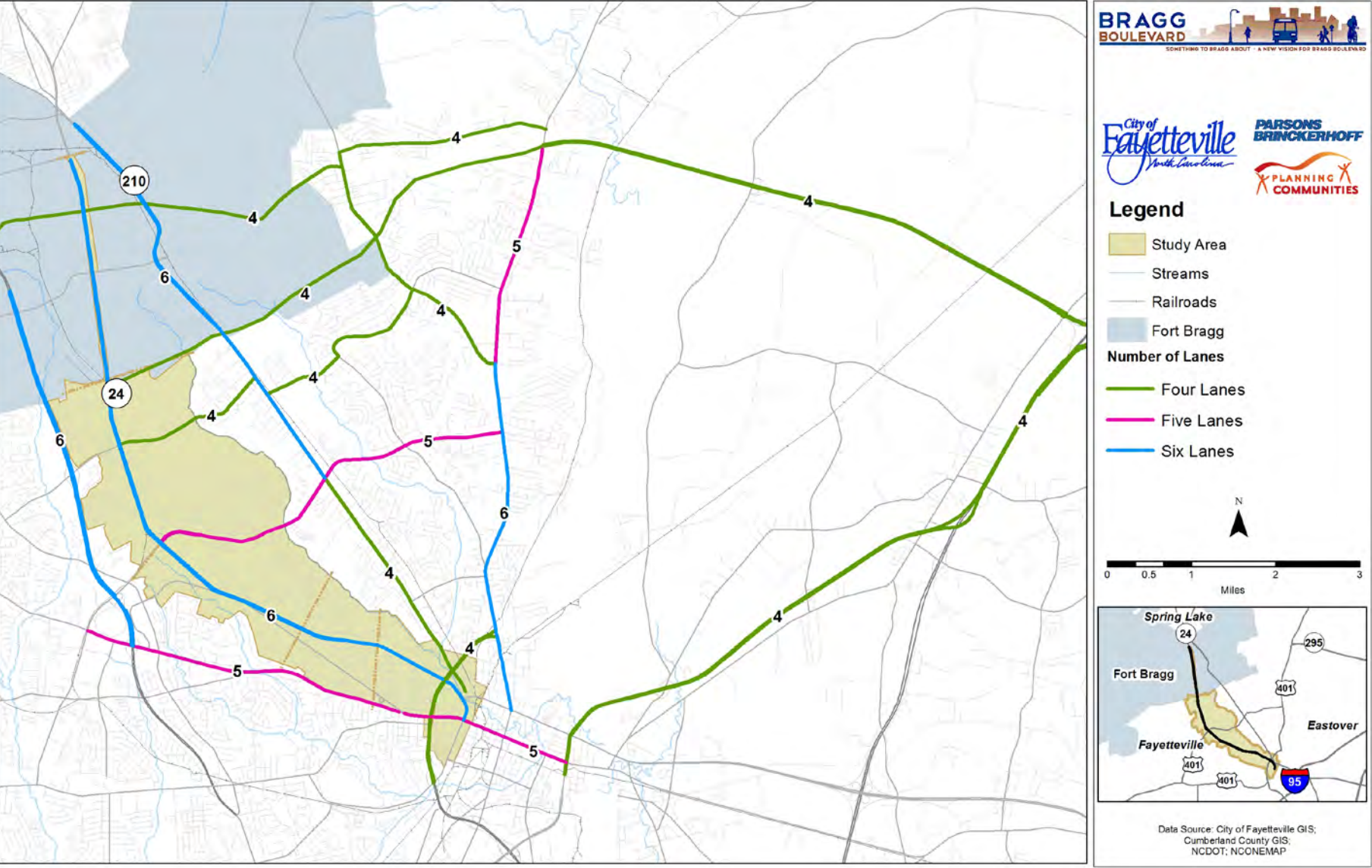
There is a partial grid of minor streets in the study area that link nearby neighborhoods with Bragg Boulevard, Fort Bragg Road, Morganton Road, and Murchison Road. (See Figure 4-2.) A well-interconnected street network provides benefits that include:

- Reduce dependence on major streets for short trips
- Reduce travel times and alleviate congestion
- Improve travel for all modes including walking, bicycling, cars, school buses, mail delivery, curbside refuse and recycling collection, and emergency responders

East-west connectivity in the study area is limited. To the east, streets connecting Bragg Boulevard with Murchison Road are listed below. To the west, streets connecting Bragg Boulevard with Morganton Road/All American Freeway are listed below.

Sections A and B (south of Westmont): Streets connecting Bragg Boulevard and Murchison Road include West Rowan Street, Blue Street/Washington Drive, and Filter Plant Drive/Ames Street. These three street connections, over a span of about one mile, form a reasonable spacing of 1,800 feet between connected streets.

Figure 4-2: Number of Lanes





Streets connecting Bragg Boulevard and Morganton Road include Hay Street (becomes Morganton Road). While there are no other streets directly connecting these two major streets, nevertheless there is an intact street grid that is well known by local residents and frequent visitors. The grid pattern changes along Fort Bragg Road, thus interrupting the ability to drive directly between Bragg Boulevard and Morganton Road.

Sections C, D, and E (between Westmont and I-295): Streets that connect Bragg Boulevard and Murchison Road include Cain Road/Pamalee Drive. These two street connections, over a span of about three miles, limit street connectivity to one connected street per one and one-half miles.

Streets connecting Bragg Boulevard and Morganton Road include Barrington Cross/Devers Street, Sycamore Dairy Road, and Skibo Road. These three streets, over a span of about three miles, limit street connectivity to one connected street per mile.

Section F (between I-295 and Randolph Street): Streets that connect Bragg Boulevard with Murchison Road include Gruber Road and Honeycutt Road.

Streets connecting Bragg Boulevard and the All American Freeway or Fort Bragg include Santa Fe Drive, the future I-295, Gruber Road, Honeycutt Road, and Randolph Street.

**Roadway Characteristics**

Bragg Boulevard is predominantly a suburban Boulevard. The six lanes of traffic and 45 mph posted speed limit give the corridor a suburban operating character. The Regional Comprehensive Transportation Plan (CTP) Expressway designation emphasizes mobility with less emphasis on access considerations. In addition to the posted 45 mph speed limit, over the nine-mile distance from Hay Street on the south to Randolph Street on the north there are 18 signalized intersections. The average one-half mile spacing of signalized intersections varies considerably along Bragg Boulevard. For example, only 250 feet separates the signalized intersections for Martin Luther King Jr. Freeway ramps intersecting with Bragg Boulevard. NCDOT Division 6 staff conducts site plan reviews and coordinate their comments with City of Fayetteville planning staff as part of land development review process. Coordination will be needed between the City of Fayetteville and NCDOT to clarify how the vision for a more transit-oriented corridor can be implemented with respect to the designation of Bragg Boulevard as an Expressway.

**Ideal Characteristics of Expressways**  
Driveway connections to abutting property are limited to one per parcel and restricted to right-in and right-out turns. Left-turns are prevented by the presence of a raised median. U-turns at nearby median openings are provided. Traffic signals are minimized and spaced far apart, per NCDOT policy.

A 2.1-mile long construction zone exists on Bragg Boulevard in May 2012, extending from Pamalee Drive on the south to a location on the north where Interstate 295 is being built near Fort Bragg. The construction project will result in a raised-curb median with six travel lanes, curb and gutter on both sides, and sidewalk on the west side of the street. The project is designated as U-3423 by NCDOT in its State Transportation Improvement Program. This \$11.8 million project is scheduled to be completed in late 2012.

Maintenance and Operations Responsibilities

Ongoing day-to-day responsibilities along Bragg Boulevard are split among the following City and State agencies:

Table 4-1. Maintenance and Operations Responsibilities	
Agency/Department	Responsibilities on Bragg Boulevard
City Police Department: Traffic Unit and Patrol Districts	Traffic law and speed enforcement
City Engineering and Infrastructure Department: Street Maintenance Division	Sidewalk maintenance and repair; pothole repair; street sweeping four times per year
City Engineering and Infrastructure Department: Traffic Services Division	Sign and pavement marking installation and maintenance; traffic signal installation and monitoring for most signals
North Carolina Department of Transportation: Division 6	Street repaving and resurfacing
City Parks and Recreation Department	Landscape maintenance

Land Use/Development Context

As described in Chapter 3, the surrounding land use and development context can generally be described by some of the following characteristics:

- Building orientation to (or away from) the street
- Setback to buildings
- Presence of significant landscaping or surface parking or buildings adjacent to the ROW
- Mix of land use types (such as residential, retail, office, institutional, etc.)
- Underutilization of properties/potential for redevelopment and in-fill development

Along Bragg Boulevard, the context can generally be described as below:

- **Downtown Core** (Segment A), bounded by Hay Street and Martin Luther King Jr. Freeway, is characterized as Central Business District.
- **Bragg Boulevard CBD** (Segment B), extending from the Martin Luther King Jr. Freeway to Westmont Drive, is generally urban commercial and industrial in nature.
- **Haymount (Segment C)**, between Westmont Drive and Barrington Cross Street, is predominantly urban residential.
- **Eutaw (Segment D)**, bounded by Barrington Cross Street to Pamalee Drive, is suburban commercial.
- **Bonnie Doone (Segment E)**, extending from Pamalee Drive to the southeastern perimeter of Fort Bragg, just south of the Knox Access Control Point (ACP), has a rural commercial and industrial character.
- **Fort Bragg (Segment F)**, the portion of the corridor that is within Fort Bragg, is special use associated with the post.



Pedestrian Infrastructure

Sidewalks exist in some places along Bragg Boulevard; however, there are significant gaps in the sidewalk network. Pedestrian crossings are possible at any of the 18 signalized intersections; however, only four intersections have basic pedestrian infrastructure such as crosswalk markings, curb ramps, pedestrian signal heads, and push buttons. This reflects a historic emphasis on vehicular mobility and road building. While new policies are in place that will continue to improve pedestrian infrastructure, the pace of change will depend on many factors including private investment in land development and redevelopment and City investment in basic pedestrian infrastructure.

The City of Fayetteville requires land developers and property owners to build sidewalk (or pay a fee in lieu of construction) along the frontage of their property whenever land is developed, subdivided, or assembled. The sidewalk requirement is enforced prior to issuing a final plat for a development project. As a result, there are several sections of relatively new sidewalk along Bragg Boulevard. Examples are evident in the 1000 block of Bragg Boulevard at Taco Bell and the 4200 block at the Villagio Apartment Homes.

The City is also investing public funds in sidewalk construction citywide. The City’s Capital Improvement Program (CIP) includes \$4.7 million in infrastructure bond funds for sidewalk construction, which may be invested through fiscal year 2015. The investment represents two percent of the total CIP. Under current City policies, once sidewalks are installed on one side of a street, that street does not qualify for additional sidewalk construction until other areas receive sidewalks on one side of the street.

Sidewalk exists more on the west side of Bragg Boulevard than on the east side. Sidewalk gaps are listed in Table 4-2. With some gaps, there generally is sidewalk on the east side between Hay Street and Filter Plant Road (Segments A and B) and from Elm Street to Shannon Drive (Segment D). Sidewalk coverage on the west side is more extensive than on the east side and coverage will be extended significantly by the end of 2012 when new sidewalk will open from Shaw Road/Santa Fe Drive to Skibo Road/Pamalee Drive (Segment E). The newly constructed sidewalk will join existing sidewalk that extends continuously to Hay Street, except on the bridge over Martin Luther King Jr. Freeway. There are large gaps in the sidewalk network along Bragg Boulevard and connecting side streets. Figures 4-1A through 4-1F highlight where these sidewalk gaps exist.

Table 4-2. Sidewalk Gaps on Bragg Boulevard	
West Side Major Gaps in Sidewalk	East Side Major Gaps in Sidewalk
Randolph Street to Shaw Road/Santa Fe Drive (approx. 3.7 miles in Segment E)	W. Rowan Street to Washington Drive (approx. 300 feet in Segment A)
Shaw Road/Santa Fe Drive to Pamalee Drive – sidewalk to be complete by end of 2012 (6,200 feet in Segment E)	Blue Street to Ames Street (approx. 600 feet in Segment B)
	Filter Plant Road to Elm Street (approx. 8,000 feet in Segments B and C)
	Shannon Drive to Villagio Place (approx. 4,100 feet in Segment D)
	Skibo Road/Pamalee Drive to Randolph Street (approx. 4.6 miles in Segments E and F)
Total West Side Gap = 3.7 miles	Total East Side Gap = 7.1 miles

Figures 4-1A through 4-1F show circles denoting the location of signalized crossings on Bragg Boulevard. The solid circle shows a complete intersection; that is, an intersection with all of the following basic pedestrian infrastructure elements (the only complete intersection in the study corridor is at Ames Street/Bragg Boulevard):

- Signal indicator heads
- Push buttons for pedestrians to communicate their desire to cross
- Wheelchair ramps that meet the Americans with Disabilities Act Accessibility Guidelines
- Crosswalk markings

Figures 4-1A through 4-1F also show the location of signalized intersections without basic pedestrian infrastructure, denoted by open circles.

In addition to the sidewalks along Bragg Boulevard, sidewalks exist on some connecting streets, although this infrastructure is limited in many areas. These sidewalks are shown on Figures 4-1A through 4-1F and listed below, beginning downtown and moving toward Fort Bragg:

- |                     |                                      |   |
|---------------------|--------------------------------------|---|
| • Hay Street        | • Belvedere Avenue (north side only) | • Sycamore Dairy Road                   |
| • Walter Street     | • Pilot Avenue (south side only)     | • Villagio Place                        |
| • West Rowan Street | • Stamper Road                       | • Pamalee Drive ramp to Bragg Boulevard |
| • Blue Street       | • Elm Street/Bobson Street           | • Johnson Street                        |
| • Filter Plant Road | • Cain Road/Fort Bragg Road          | • Bonnie Street                         |
| • Westmont Drive    | • Tally Drive                        | • Stein Street                          |
| • Greenland Drive   | • William Clark Road                 |   |

Connecting street sidewalks are important to provide safe accommodation for customers and employees of businesses along Bragg Boulevard and to the residential areas behind the commercial development. They are also essential for current and future riders of FAST bus service as they walk to bus stops on Bragg Boulevard.

More than a mile of new sidewalk is under construction in 2012 that will, when complete, form a continuous sidewalk on the west side of Bragg Boulevard for nearly the entire study corridor. The remaining missing section of sidewalk on the west side will be on future Fort Bragg property. Significant gaps remain in the sidewalks on the east side of Bragg Boulevard, totaling more than 7 miles of missing walkway. The planning level estimate of the cost to close a 7-mile gap is about \$3 million (in 2012 dollars). Additional investment would be needed to transform all of the 18 signalized intersections into complete intersections with accommodations for pedestrians, bicyclists, and transit patrons.



### Bicycle Infrastructure

Bicycles are to be operated as vehicles, by law, according to the “Rules of the Road”. As such, the infrastructure needed to safely accommodate and encourage bicycle use is similar to motor vehicle infrastructure. The following bicycle infrastructure elements are important:

- Travelway – there are different types of accommodations:
  - wide outside lane (14 feet compared with conventional 12 foot travel lane) that are shared by cars, trucks, buses, and bikes
  - bike lane (marked by solid white lines, typically 4 to 6 feet wide)
  - paved shoulder (minimum of four feet excluding any rumble streets, eight feet is desirable on streets with 45 mph speed limits)
  - multi-use path (best practices recommend multi-use paths only where driveway conflicts are minimal)
- Pavement surface quality – (turn drainage grates sideways, smooth edge between gutter and travel lane, and sweep debris periodically)
- Parking – (secure parking racks that are visible from, and a reasonable distance to, the building entrance)
- Traffic signal detection – (to detect lightweight bikes to give a green light and to provide sufficient time for a bicyclist to clear the intersection before signals turn red)

Currently, none of these bicycle infrastructure elements are provided on Bragg Boulevard. There are striped bicycle lanes on several connecting streets in the Haymount neighborhood, including Ames Street between Bragg Boulevard and Rowan Street, Glenwood Drive between Bragg Boulevard and Woodland Drive, Woodland Drive between Westmont Drive and Oakridge Avenue, and Woodside Avenue between Hay Street and Rowan Street.

Improvements would be needed over the entire 9.2 mile corridor to accommodate bicycle traffic such as smooth pavement surface, bicycle lanes, traffic signal detection, and bicycle parking.

### Transit Service

Bus service along Bragg Boulevard consists of three city bus routes that cross over or drive on Bragg Boulevard for very short distances, in addition to Spring Lake and Fort Bragg shuttle services. These three routes are described below and shown in Figure 4-3.

#### Route 6

Route 6 follows Bragg Boulevard for a very short distance between Skibo Road and Shaw Road as it travels between Cross Creek Mall, WalMart, and University Estates. There are two bus stops on northbound Bragg Boulevard identified by signs with route numbers and schedules. There are no signed bus stops in the southbound direction. It may be that the signs are missing for the southbound bus stops as the #6 bus was observed during the plan development stopping for a patron in the vicinity of Mike Street. The northbound bus stops are in the middle of a construction zone. Signs with bus schedules are posted just north of Johnson Street and just south of Fleischman Street. These locations are about 2,000 feet apart. Pedestrian access to the bus stops is currently extremely difficult as construction dirt is mounded and only a dirt path exists to the bus stops. The intersection of Johnson Street and Bragg Boulevard is signalized, although no pedestrian infrastructure elements are provided.

**Route 12**

Route 12 follows Bragg Boulevard for a very short distance between Filter Plant Road and Rowan Street as it travels between Fayetteville State University and downtown Fayetteville. There are four signed bus stops on northbound Bragg Boulevard identified by signs with route numbers and schedules. There are no signed bus stops in the southbound direction. The northbound bus stops provide signs and bus schedules; these are located south of Washington Street (no sidewalk access), south of Blue Street (no sidewalk access), south of Ames Street (no sidewalk access), and adjacent to a vacant building next to Taco Bell where new sidewalk is provided.

**Route 14**

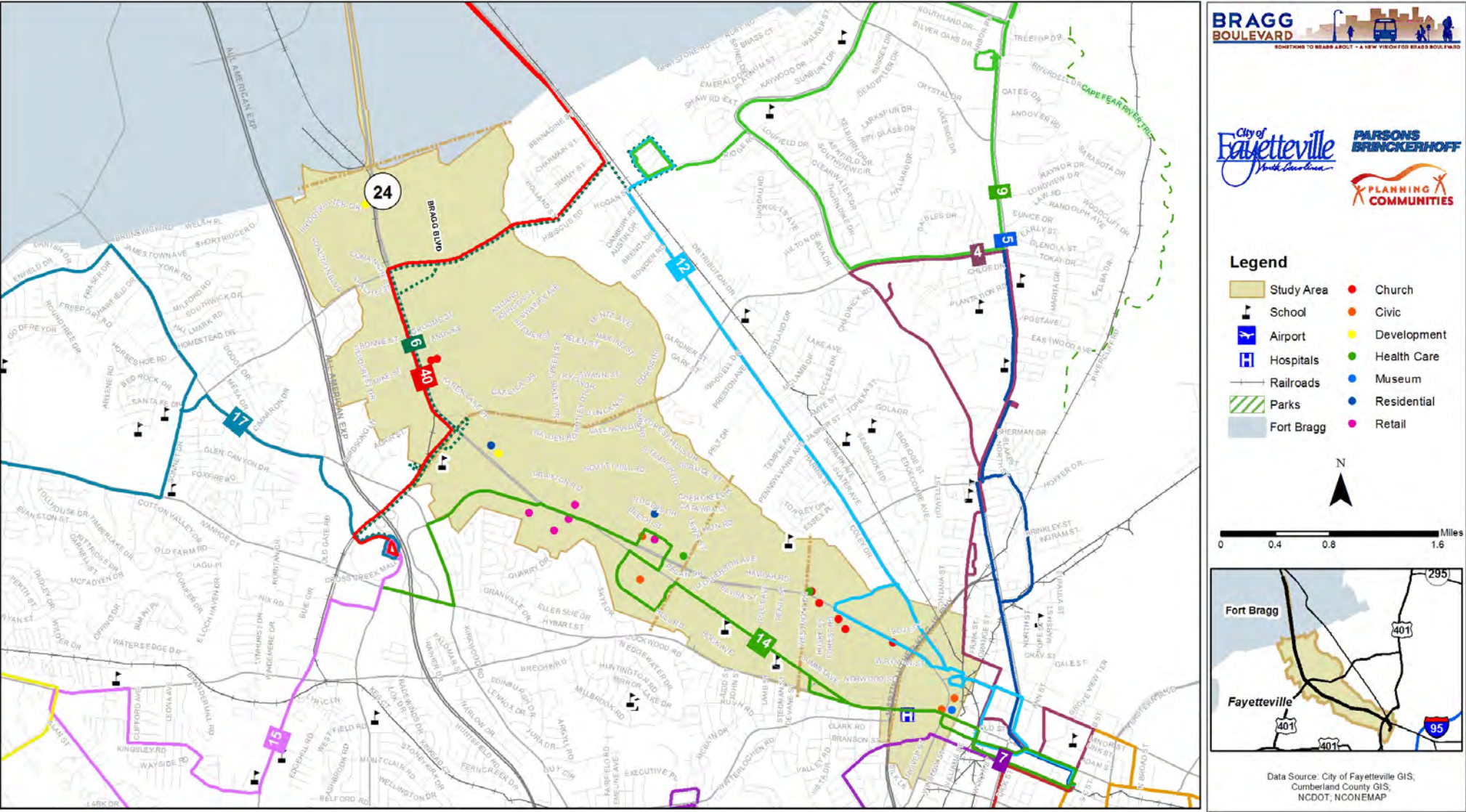
Route 14 follows Bragg Boulevard for a very short distance between Fort Bragg Road and Sycamore Dairy Road as it travels between downtown Fayetteville, Fayetteville Technical Community College, Eutaw Village Shopping Center, and Cross Creek Mall. Eutaw Village Shopping Center is one of the largest and busiest retail centers on Bragg Boulevard. There are two northbound and two southbound bus stops in this segment of Bragg Boulevard. One northbound and southbound bus stop is located just south of the signalized intersection at Shannon Drive and Bragg Boulevard. A shelter and bench are provided at the southbound bus stop, which is adjacent to the Flea Market and Farmers Market. The southbound bus stop has adjacent shade trees and a trash receptacle. Only a sign and schedule are provided at the northbound bus stop. The other bus stops are located near the signalized intersection of Cain Road/Fort Bragg Road at Bragg Boulevard; however, this intersection has no pedestrian infrastructure elements. The northbound bus stop, located just south of Cain Road, provides only a sign and bus schedule. The southbound bus stop, located north of Fort Bragg Road, provides only a sign and bus schedule.

**Route 17**

Route 17 does not travel on Bragg Boulevard. Route 17 travels to Cross Creek Mall where a transfer to other routes allows patrons to go to Bragg Boulevard or downtown. It is the only City bus route that comes close to a transfer point for the Fort Bragg Shuttle Service that operates on the U.S. Army installation. The transfer to Fort Bragg requires a ten-minute walk along busy Reilly Road and the Access Control Point. The travel time by bus from on-Post at Fort Bragg to downtown Fayetteville is estimated to take 100 minutes under scheduled service and does not include travel time within Fort Bragg. Actual times may vary depending on weather and traffic congestion. Significant traffic congestion was observed at 1 pm on a weekday along Route 17; queues associated with ACPs at Yadkin Road and at Reilly Road. On-time performance for Route 17 is likely to be affected by the traffic congestion.



Figure 4-3: Existing Bus Routes



**Spring Lake Transit**

The Town of Spring Lake operates public bus service weekdays and Saturdays to connect its citizens with more than a dozen places town wide and Cross Creek Mall in Fayetteville. The bus stop at the Mall is between Belk’s Department Store and Macy’s Department Store, which is not within walking distance of the bus transfer center operated by Fayetteville Area System of Transit (FAST). Scheduled arrivals and departures for Spring Lake Transit at Cross Creek Mall are not coordinated with FAST bus schedules. Spring Lake Transit has a bus stop in Spring Lake that is a short walk to the Butner Access Control Point for Fort Bragg. It is possible, but not practical, for someone in downtown Fayetteville to travel by bus to Cross Creek Mall and then transfer to Spring Lake Transit and alight near the Butner ACP to access Fort Bragg. There are no Spring Lake Transit bus stops in the study area.

**Fort Bragg Shuttle Service**

Fort Bragg is a large installation with its own internal shuttle system. Shuttle vans operate every 10 to 20 minutes, including to the perimeter where Access Control Points (ACP) connect with public roads in Fayetteville and other surrounding cities and towns. Shuttles do not travel beyond the ACPs.

**Summary of Existing Transit Services**

Bus service is not provided directly between downtown Fayetteville and Fort Bragg, nor is direct service provided from anywhere in the Bragg Boulevard study area to Fort Bragg. Utilizing transit services currently requires several transfers and significant travel time. Improved transit service along the corridor has been identified in the vision and goals for the corridor.



### Safety on Bragg Boulevard

Safety can be measured in a variety of ways. The most readily available and of greatest impact is the crash history for motor vehicles, bicyclists, and pedestrians. Crashes reported to law enforcement officials are shared with and maintained in a database by NCDOT. The most recent five-year crash records are summarized in Table 4-3. To assess the relative significance of the crash history, a corridor crash rate is calculated and then benchmarked by comparing with statewide average crash rates for other urban and rural highways in North Carolina.


**Table 4-3: Bragg Boulevard (NC 24-NC 87) Crash Rate Comparison**

**From Hay Street in Downtown Fayetteville to Fayetteville-Fort Bragg Municipal Limit; Length: 6.42 Miles**

Crash Type	Number of Crashes	Percent of Total	<u>Crash Rate</u> (Crashes Per 100 Million Vehicle Miles)*		<u>Benchmark Rates</u>
					NC Routes Urban areas 4 or More Lanes Median-divided No control of access (Crashes Per 100 Million Vehicle Miles)**
Total Crashes	1811	100.0%	467.9		330.56
Fatal Crashes	8	0.4%	2.1		0.81
Non-Fatal Injury Crashes	634	35.0%	163.8		110.02
Total Injury Crashes	642	35.5%	165.9		N/a
Property-damage-only Crashes	1169	64.5%	302		
Night Crashes	416	23.0%	107.5		68.97
Wet-pavement Crashes	397	21.9%	102.6		62.37
Alcohol/Drugs Involvement Crashes	96	5.3%	24.8		N/A
Rear-end Crashes	725	40.0%	187.3		
Angle Crashes	356	19.7%	92		
Sideswipe, Same Direction Crashes	251	13.9%	64.8		
Left turn, Same Roadway Crashes	69	3.8%	17.8		

\* Crash Rate is based on vehicle exposure of 387.07 Million Vehicle-Miles of Travel for NC 24-NC 87. A vehicle-mile is equal to one vehicle that has traveled one mile.

\*\* The Benchmark Rate (Statewide Average Crash Rate from Similar Facilities) is based on 2008 to 2010 crash data from NCDOT's Traffic Safety Unit, which includes police reports from the City of Fayetteville and Cumberland County Sheriff's office.

Note: Above normal crash rates, as compared to statewide averages are highlighted in 

The total crash rate on Bragg Boulevard is 372.6 crashes for every one hundred million vehicle-miles traveled. A vehicle-mile is one vehicle that travels one mile. The total crash rate, from Rowan Street to Murchison Road (near Spring Lake), is more than double the statewide average rate for rural highways and more than 40 percent higher than urban highways. The total crash rate includes all reported crashes. The crash rate on Bragg Boulevard is significantly higher as compared to average crash rates.

Over the past five years, one out of every three crashes on Bragg Boulevard resulted in an injury or fatality. As the total number of crashes is twice what is normal, safety is an important concern for corridor planning. In particular, rear-end type crashes constitute more than 40 percent of all crashes which can be attributed primarily to a motorists’ failure to pay attention. Numerous driveways along the corridor may prompt some motorists to stop suddenly, which can trigger a rear-end type of crash. Similarly, a failure to pay attention may cause crashes as traffic signals turn amber and red. Other notable benchmark comparisons shown in Table 4-3 are the nighttime and wet conditions crash rates, which are 30 to 150 percent higher than statewide average rates.

Figure 4-4 illustrates the crash rate at each intersection along the corridor and total crashes at each intersection along the corridor and their relative ranking are presented in Table 4-4. This table highlights some of the intersections that present the greatest safety concerns along the corridor and should be considered in prioritizing intersection safety improvements that can support implementation of the Corridor Plan.

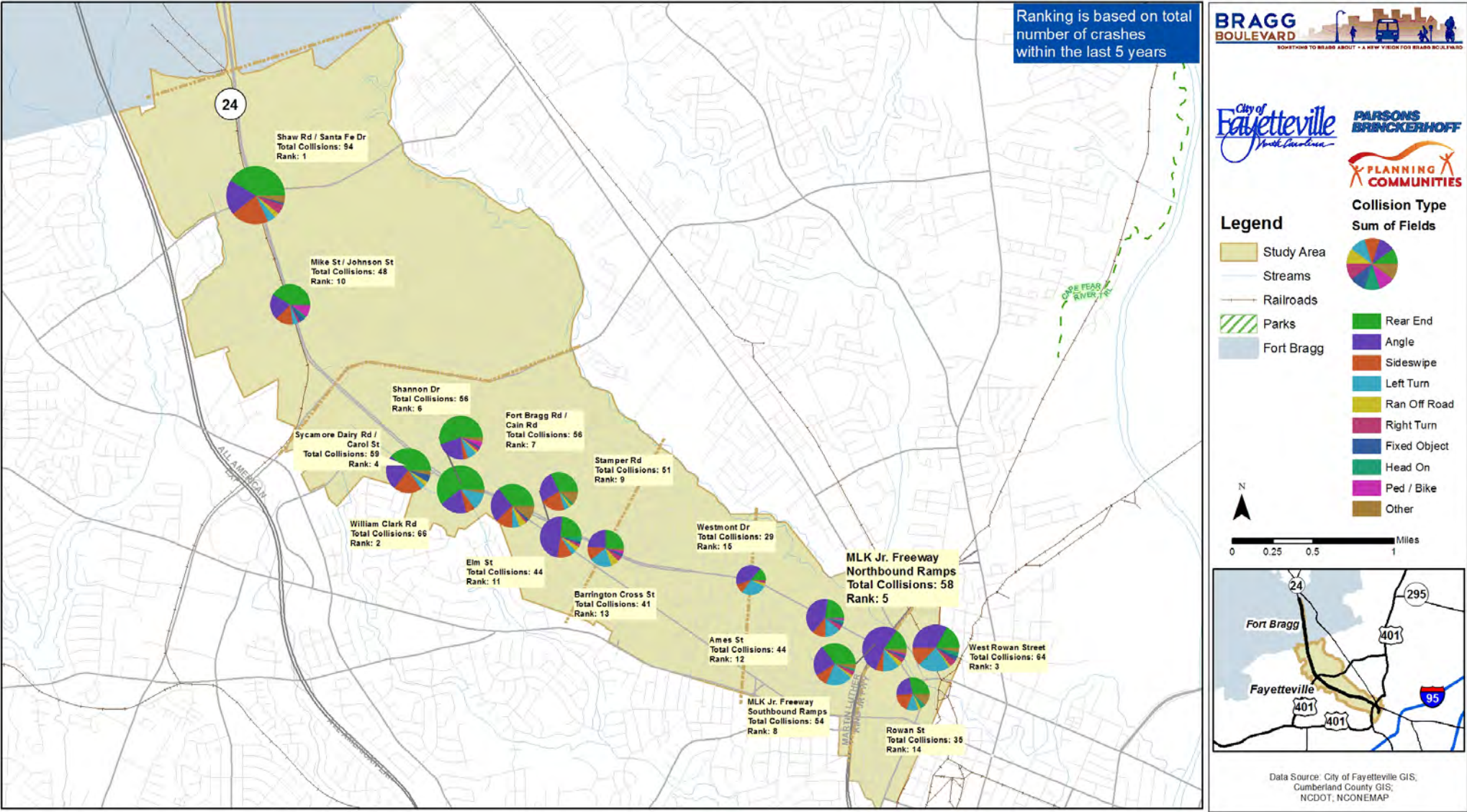
**Table 4-4: Bragg Boulevard Top 15 Crash Locations**

Intersection on Bragg Boulevard	Ranking (Top Crash Locations)	Total Number of Crashes*
Shaw Road/Santa Fe Drive	1	94
William Clark Road	2	66
West Rowan Street	3	64
Sycamore Dairy Road/Carol Street	4	59
Martin Luther King Jr. Freeway eastbound ramps	5	58
Shannon Drive	6	56
Fort Bragg Road/Cain Road	6	56
Martin Luther King Jr. Freeway westbound ramps	8	54
Stamper Road	9	51
Mike Street/Johnson Street	10	48
Elm Street	11	44
Ames Street	11	44
Barrington Cross Street	13	41
Rowan Street	14	35
Westmont Drive	15	29

\*Number of Crashes recorded in 5 years (3-1-2007 to 2-29-2012) within 100 feet of the intersection



Figure 4-4: Top 15 Crash Locations



Travel Markets

The Federal Transit Administration (FTA) uses the term *travel markets* to describe districts within a region that have strong relationships in trip-making; that is, how many people traveling each day between the two districts. Trips are measured as person-trips, which include walking, bicycling, transit, carpool, and single-occupant vehicle travel.

In the Fayetteville Regional Travel Demand Model, there are 17 defined districts including one for downtown Fayetteville, one for Fort Bragg, and three for the study area along Bragg Boulevard and adjacent commercial and residential areas. To provide a sense of scale for understanding travel markets, the trip making within each district can be compared. This is relatively short travel between nearby buildings, a walk to the store, or perhaps a very short commute. Within Fort Bragg in 2006, there were 72,286 daily person trips beginning and ending within the confines of Fort Bragg. In the study corridor from Randolph Street to Hay Street, there were 23,671 daily person trips. Within downtown Fayetteville, there were 2,177 daily person trips. Comparing these figures suggests that travel within Fort Bragg is 33 times busier than in downtown Fayetteville. These figures are projected to grow by nearly 50 percent each in downtown and at Fort Bragg by the year 2035. Within the study corridor, trip making is projected to increase by 34 percent. All three districts are expected to realize economic growth and activity.

The travel market between downtown Fayetteville and Fort Bragg in 2006 was relatively small, representing just 600 daily trips. According to the FAMPO regional model, this figure is projected to increase by about 70 percent by the year 2035; however, the total daily trips in the future is still low at just over 1,000 daily trips. The relationship between Fort Bragg and the Bragg Boulevard study corridor is much stronger. Trip making in 2006 was approximately 20,600 person-trips per day. This figure is projected to increase more than 55 percent by the year 2035 based on model forecasts. This is a strong travel market that could be served by more than motor vehicle connections, and could be served by improving accommodations for bus, bicycle, and pedestrian modes of transportation. The travel market between downtown and the study corridor in 2006 was 4,300 person-trips and is projected to increase by 34 percent by the year 2035. This is not a particularly strong travel market.

Trip lengths were estimated in 2006 and 2007 through statistically valid survey methods involving residents in Fayetteville households, patrons riding FAST transit, and soldiers living in military housing on-Post at Fort Bragg. Participants tracked one day of travel using a trip diary and then reported their entire trip making to surveyors. The mean trip length for all participants was 16.9 minutes. Twenty-three percent of all trips took 5 minutes or less. The total amount of time spent traveling for the day was 53.8 minutes for participants of the household-based survey and 87.8 minutes for bus patrons participating in the survey while riding transit.

Traffic Congestion

Detailed information about congested intersections and interchanges is not readily available; however, estimates are presented based on daily traffic counts and analysis using a regional travel demand model. The model has been calibrated to existing traffic counts on many streets in the region and has been certified by NCDOT.

Daily traffic counts conducted in 2010 represent the most recent available data that has been certified by NCDOT. These are shown in Table 4-5. For each segment of Bragg Boulevard, the daily traffic count is compared with an estimate of the capacity of that street segment; that is, the maximum number of vehicles that can travel it in a 24-hour period of time. The capacities are adjusted to reflect normal operating conditions such as lower demand at night.



Projected 2035 levels of service (LOS) are also shown in Table 4-5. Comparing 2010 and 2035 LOS indicates segments where street improvements will result in improved traffic conditions, such as in Segment E. It also reflects anticipated changes in access, such as in Segment F, where public access will be restricted in the future. In all other segments of Bragg Boulevard, traffic conditions are anticipated to worsen by the year 2035. Segments B and D are characterized by peak hour vehicle queuing that may block adjacent intersections, waiting through two or more red-light cycles before clearing the congested intersection, and a likely increase in the rate of rear-end type crashes.

Table 4-5. Traffic Volume and Levels of Service (LOS) on Bragg Boulevard

Segment	Segment Limits	Travel Lanes	Speed Limit	Median	2010 Average Daily Traffic (ADT)	2010 ADT V/C Ratio**	2010 LOS	2035 ADT Volume***	2035 ADT V/C Ratio	2035 LOS
A	Hay Street to Martin Luther King Jr. Freeway	6	35	Raised Median	23,000	0.48	B	29,000	0.60	C
B	Martin Luther King Jr. Freeway to Westmont Dr.	6	45	TWCTL*	30,000	0.63	C	37,800	0.79	D
C	Westmont Dr. to Barrington Cross Rd	6	45	Divided	32,000	0.59	C	38,700	0.72	D
D	Barrington Cross Rd. to Pamalee Dr./Skibo Rd	6	45	Divided	37,000	0.69	C	42,800	0.79	D
E	Pamalee Dr./Skibo Rd. to Municipal Limit	6	45	Divided	43,000	0.72	D	37,300	0.62	C
F	Municipal Limit to Randolph St	4	50	Divided	39,000	0.57	C	14,300	0.21	A

\*TWCTL = Two-way Center Turn Lane.  
\*\*Capacity values were assumed based on LOS E criteria for urban multi-lane arterial with frequent traffic signals.  
\*\*\*Year 2035 ADT estimates were derived by adding the projected growth or change in traffic volumes from the FAMPO model to baseline 2010 conditions.

Table 4-6. Level of Service (LOS) Definitions

LOS	V/C Ratio	Condition
A	<0.4	Free flow traffic conditions
B	0.40-0.55	Very light traffic conditions
C	0.55-0.70	Light traffic conditions
D	0.70-0.85	Moderate traffic congestion
E	0.85-1.0	Heavy traffic congestion
F	>1.0	Traffic backups and long delays

Note: V/C thresholds were adapted from the FAMPO’s regional travel demand model.

### Access Management

Access to Bragg Boulevard from adjacent properties is provided via driveways that are allowed by permit from NCDOT. On major streets such as Bragg Boulevard, NCDOT is not required to provide left-turn access directly to or from a parcel; but they must provide for right-turn access for sites approved for development by the City. Left-turns are restricted when a median island is constructed. A median island is under construction in 2012 on Bragg Boulevard in Segment E from Skibo Road/Pamalee Drive to Interstate 295; when completed the result will be that Bragg Boulevard will provide six lanes of traffic that are median-divided over most of the study area. The most significant gap without a median will be Segment B and the southern portion of Segment C, where a 5-lane roadway still exists. As shown in Table 4-7, the number of driveways per mile peaks at 98 in Segment B, which is much higher than in other segments.

Without a median, the number of conflict points is much higher, reflecting potential crash locations due to the combination of left and right-turn movements into and out of driveways. When Bragg Boulevard is converted into a 6-lane median-divided street, compared to the current 5 and 7-lane undivided cross-section, it is anticipated to improve traffic safety. While it is difficult to predict the future crash rate solely based on future lane configuration, a 10 to 20 percent decrease in crash rates can be expected based on the recent trends in crash rates in North Carolina on similar facilities. Other auxiliary improvements such as good intersection design, U-turn accommodations, roadway lighting, wayfinding signs, signal coordination, protected left-turn phasing, lower speed limit, advance road signs, rumble strips on side streets, etc. can further improve traffic safety along the corridor and reduce crash rates.

Segment D also has a relatively high density of driveways with 69 driveways per mile. Unlike Segment B, this segment has a median island. The high density of driveways is somewhat controlled in that many are right-in/right-out only type driveways. These provide for safer movements than full-access (left and right turn) type driveways.



Table 4-7. Bragg Boulevard Existing Access Management

Segment	Segment Limits	Per Mile Driveway Density	Driveway Conflicts within Intersection Functional Area	Type of Median	Number of Median Openings*	Evaluation
A	Hay Street to Martin Luther King Jr. Freeway	37	Few Locations	Varies from 2-way Left Turn Lane to No Median to Raised Concrete Island	N/A	No Significant Access Issues
B	Martin Luther King Jr. Freeway to Westmont Dr.	98	Many Locations	Varies from No-median to 2-way Left Turn Lane	N/A	Unsafe Access Conditions
C	Westmont Dr. to Barrington Cross Rd	28	Few Locations	2-way Left Turn Lane between Westmont Dr. and Glenville Ave; Grassy Median between Glenville Ave and Barrington Cross Rd	3	No Significant Access Issues
D	Barrington Cross Rd. to Pamalee Dr./Skibo Rd	69	Several Locations	Landscaped Median	4	Unsafe Access Conditions
E	Pamalee Dr./Skibo Rd. to Fayetteville Municipal Limit	46	Few Locations	Divided Highway	7	No Significant Access Issues
F	Fayetteville Municipal Limit to Randolph St	1	None	Divided Highway	2	Good Access Conditions
	Study Corridor	41				On average, there is one driveway every 130 ft.

\*Median openings varied from left-over to full movements

Signal Spacing

The distance between signalized intersections is important for many reasons, including conveniently located safe crossings for pedestrians and the opportunity to keep motor vehicles traveling together in a group, or platoon, which aids in synchronizing the signals in a coordinated computer system. To create a pedestrian-friendly environment, a spacing of no more than 500 feet is recommended. To optimize traffic signal synchronization for motor vehicles, one-quarter to one-half mile distance between signals is typically recommended.

Table 4-8. Bragg Boulevard Traffic Signal Spacing

Segment	Number of Signalized intersections	Average Distance between Signalized Intersections (In feet)	Comments
A: Downtown Core	6	635	Better for pedestrians
B: Bragg Boulevard CBD	1	2,950	Need more signals for pedestrians
C: Haymount	1	1,215	Balanced between pedestrian-friendly and coordination for vehicles
D: Eutaw	5	1,270	Reasonable balance
E: Bonnie Doone	2	7,550	Need more signals for pedestrians
F: Fort Bragg	3	3,750	No comment; will be military-only in near future.

Planned Transportation Improvements

Extensive planning has been undertaken to forecast housing, jobs, and the resulting transportation needs for the region in the future. These efforts have contributed to detailed plans to widen and extend specific streets and highways, as described below.

Planned Roadway Projects

Street and highway improvements are planned by several different government agencies, but primarily the Fayetteville Area Metropolitan Planning Organization (FAMPO), which coordinates input and decision-making from local and State governmental agencies including the City of Fayetteville and NCDOT. FAMPO estimates that the region receives from State and Federal transportation sources approximately \$97.5 million per year for transportation improvement projects. The following is a listing of major improvements planned or under construction on streets and highways in the study area or likely to have an effect on the study area. The year of construction complete is included. The projects listed below and illustrated in Figure 4-5 total more than \$300 million.

Bragg Boulevard

2012: complete 6 lanes with raised median, from Pamalee Dr. to Shaw Rd., an \$11.8 million project.

2015: construct new Access Control Point (ACP) north of I-295 and close Bragg Boulevard north of the ACP to preclude public travel and only permit military-related access.



Interstate 295

2012: complete 4 lanes I-295, from Bragg Boulevard to Murchison Rd, a \$52.5 million project.

2014: complete 4 lanes I-295, from Murchison Rd. to Ramsey St., a \$55.2 million project.

2015: complete 4 lanes I-295, from Bragg Boulevard to Yadkin Rd., a \$54.3 million project.

All American Freeway

2015: Complete 6 lanes, from Owen Dr. to north of Santa Fe Dr., a \$34 million project.

Morganton Road

2015: Add lanes in each direction and replace bridge, from Glensford Dr. to Sycamore Dairy Rd., an \$11.6 million project.

Shaw Road

By 2022: Build on new location and widen to multi-lane between Bragg Boulevard and McArthur Road using existing alignment of Rosehill Road, a \$66.8 million project.

Villagio Place/Pine Meadow Drive Extension

The City of Fayetteville is cooperating with NCDOT to complete environmental and design studies of a street extension that would form a new collector street connection between Bragg Boulevard and Pamalee Drive. The street exists on the Bragg Boulevard side of a creek and pond, recently paid for and constructed by the developer of Villagio Luxury Apartments, and includes the potential for wetlands.

Murchison Road

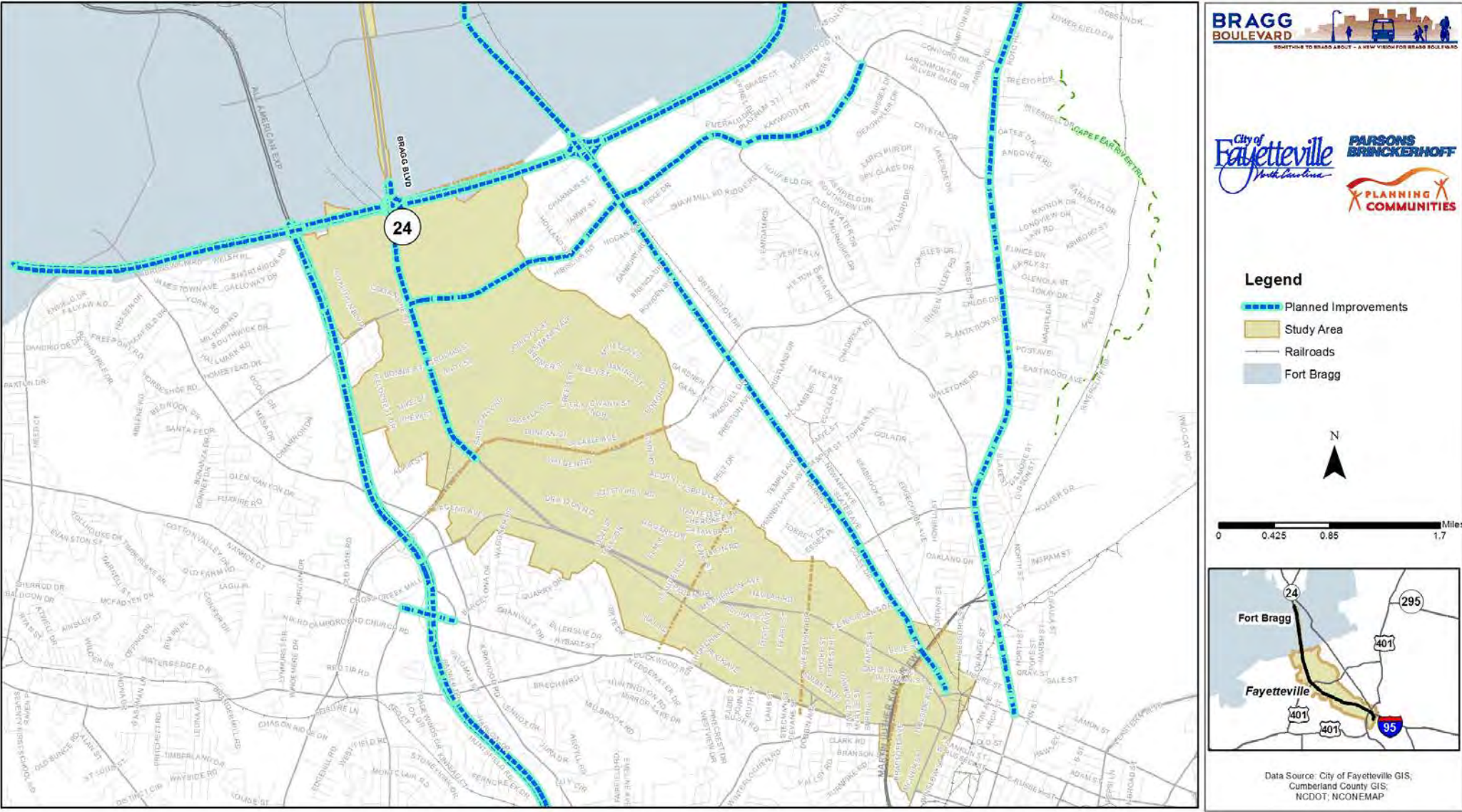
2012: Complete 6 lanes with interchanges, from I-295 to Honeycutt Rd., a \$20.6 million project.

2015: Complete 6 lanes with median, from Honeycutt Rd. to NC 210, a \$34.4 million project.

2022: Widen to 6 lanes with median, from Pamalee Dr. to I-295, a \$19.7 million project.

By 2022: Widen to add lanes between Rowan St. and Pamalee Dr., a \$35 million project.

Figure 4-5: Planned Transportation Improvements



Prosperity Parkway (also known as Spring Lake Loop Road)

By 2022: Complete feasibility study to refine cost estimate for a street on new location around the eastern edge of the Town of Spring Lake, preliminary estimate \$41.3 million.

Rowan Street

2015: Replace bridge over CSX railroad near Bragg Boulevard, a \$23.4 million project.

Ramsey Street

2012: Complete access management (islands and directional crossovers), from Law Rd. to Andrews Rd., a \$2.5 million project.

By 2022: Widen to add lanes between Grove St. and Slocomb Rd., an \$84 million project.

Downtown

Rail improvements to detour Fort Bragg rail traffic out of downtown, which improves military logistics and the livability of downtown Fayetteville, a \$9.5 million project.

Citywide

2015: Sidewalk construction using Infrastructure Bonds, total of \$4.7 million.

Interstate 95

No date: NCDOT is evaluating the results of a study and may recommend charging tolls on I-95 through North Carolina.

**Planned Bus Service Improvements**

The City of Fayetteville prepared a “Transit Development Plan” (TDP) in 2009 to analyze existing revenue and expenditures with a goal of optimizing the productivity of the existing route system. The TDP proposes a broad array of service enhancements to cost-effectively boost ridership and improve the physical attributes of facilities, including a new downtown transit center as well as more shelters and benches at bus stops. To improve the cost-effectiveness of the system, recommendations are made to restructure several routes. The report recommendations are organized within 3-, 5-, and 10-year horizons. The TDP recommends new service on major corridors, but does not specifically name which corridors. The TDP highlights some of the recommendations of the Fort Bragg Transportation Study, including the potential introduction of Bus Rapid Transit (BRT) service connecting Fort Bragg with downtown Fayetteville; however, the recommended route for BRT is along the All American Freeway – not Bragg Boulevard.

Funding for bus service improvements come from a variety of local, state, and federal government sources. Transit is a department within City government and implementation of the TDP is subject to annual budget decisions by City Council. Since the TDP was accepted by City Council in 2009, the ensuing TDP-related financial decisions by City Council include:

- In 2009, the City began charging a \$5 vehicle license tax to support transit operations.
- In FY 2011 and 2012 there were transfers from the General Fund to support transit operations; these were \$2.7 million and \$2.9 million respectively.



- FY 09-10 City budget allocated \$675,000 to begin implementing TDP recommendations.
- Due to economic recession, subsequent budgets have included limited to no funding for TDP implementation, although extended nighttime hours and the 401 Bypass Route were funded during FY 11-12.
- The 2012-2013 budget has not been adopted by City Council (at the time of this report).

### Summary of Access and Transportation Characteristics

This chapter presents a transportation system that has historically emphasized mobility by motor vehicle over other modes of transportation. Basic infrastructure to walk, ride a bike, or take transit between downtown Fayetteville and Fort Bragg is extremely limited. There is no existing bus service along the length of the corridor and no bicycle facilities. By late 2012, sidewalk will be provided along the entire west side of Bragg Boulevard south of Shaw Road/Santa Fe Drive; however, more than 7 miles of sidewalk is missing on the east side of Bragg Boulevard and there are needs for additional crosswalks, curb cuts, and other pedestrian amenities throughout the corridor.

Downtown Fayetteville is the heart of the region. As a testament to the strong regional sentiment felt for downtown it is realizing a renaissance. New public and private investment is transforming the area, drawing citizens and visitors to its retail, restaurant, and entertainment venues. Hay Street is at the center of this activity. A new icon on the downtown cityscape is the Airborne and Special Operations Museum at the corner of Bragg Boulevard and Hay Street, which features a Visitors Center, ceremonial outdoor stage, and memorials to service men and women. Another attraction is the North Carolina Veterans' Park, located adjacent to the museum.



Nine miles to the north is the economic engine of the region. Fort Bragg is the largest army base in the world. It is home to 40,000 people and was recently annexed by the City of Fayetteville. Over the past seven years, Fort Bragg has grown in population and importance. It is now home to U.S. Forces Command (FORSCOM) and U.S. Army Reserve Command (USARC).

Bragg Boulevard is one of three streets or highways providing direct access between downtown Fayetteville and Fort Bragg; the others include Morganton Road/All American Freeway and Murchison Road. Other parallel streets and highways provide indirect routes between these two places, together forming a network of multi-lane streets and highways that will someday provide 12 travel lanes in each direction between downtown and Fort Bragg. Construction crews are currently at work on Bragg Boulevard, widening the northern section from Skibo Road/Pamalee Drive north to where a new interchange with the future Interstate 295 is also under construction. By late 2012, Bragg Boulevard in this section will have six travel lanes, a landscaped median, and a sidewalk on the west side of the street.

Bragg Boulevard is viewed at different angles and scales:

- Statewide view: Bragg Boulevard is part of an interconnected and continuous network of 55 major highways designated as the Strategic Highway Corridors Initiative. The purpose is to maintain high-speed operations for motor vehicles with few interruptions.
- Regional view: Bragg Boulevard is undergoing significant changes; first, to widen and build a median in the pursuit of consistency from one end of the corridor to the other; second, the northern end will some day in the near future be restricted only to military-related use as part of a security improvement at Fort Bragg. Public traffic will be detoured and diverted onto Interstate 295 and Murchison Road to bypass Fort Bragg.
- Local view: Bragg Boulevard is viewed by many as an opportunity to enhance the physical and community connections between Fort Bragg and Fayetteville. The 33,000 motorists who use Bragg Boulevard each day could be better served if public and private investments are made to improve multimodal transportation, visual appeal, and visitor accommodation. Branding Bragg Boulevard in a positive way, with activity centers that truly provide a “sense of place” can create a signature corridor with destinations for residents and visitors to enjoy.

Improving transit connections between Downtown Fayetteville and Fort Bragg is a main focus of this plan. Analyses of travel market data from the Fayetteville regional travel demand model indicates that there is a strong existing and potential travel market between Fort Bragg and the study corridor. However, a trip by bus now requires more than one and one-half hours and two transfers.

Improved bus service between downtown and Fort Bragg could use Bragg Boulevard or an alternate route. It could take the form of express service with limited stops or it could be premium or enhanced bus service that is used to support economic development initiatives at one or more locations in the corridor. To support those economic development opportunities and to support transit, considerable investment would be needed to create basic or enhanced pedestrian, bicycle, and transit infrastructure. Today, that infrastructure is limited.

The preferred route from Fort Bragg, according to the Fort Bragg Transportation Plan, is to link Fort Bragg via Bragg Boulevard and this study will identify mobility options for this corridor. In accordance with goals for the study, recommendations will be developed for facilities and services to enhance travel by transit, bicycling, and walking along Bragg Boulevard. Continued redevelopment in the corridor using urban footprints for buildings close to the street will also facilitate increases in walking, bicycling, and transit use. These goals and strategies to support them will be further explored in later chapters of this Corridor Plan.

# 5.0 A NEW VISION FOR BRAGG BOULEVARD

The Bragg Boulevard Corridor Plan builds upon existing assets and sets forth a new vision for the corridor’s future. Chapter 5 describes this vision as well as the process used to define it and the challenges and opportunities to which it responds. The contents of this chapter include the following:

- Detailed description of the community engagement process
- Overview of challenges and opportunities identified for the corridor
- Description of the corridor vision and goals

Through these elements, Chapter 5 establishes a guiding framework for the concepts and recommendations that are presented in the remainder of the Bragg Boulevard Corridor Plan.

## Community Engagement Process

The following sections provide detailed information on the process used to engage key stakeholders and members of the general public in the plan development process. Following this description, an overview of findings—including challenges, opportunities, and corridor goals—is provided.

## Plan Promotion and Advertisement

From the beginning, the project team employed a broad communications and outreach strategy for the Bragg Boulevard Corridor Plan. All published materials relating to the plan were branded with a unique logo developed specifically for this effort, identifying Bragg Boulevard and the plan as something new, innovative, and unique.

The project team used a variety of means to spread the word about the planning process and related events, including the planning charrette. Local stakeholders, including developers, local businesses, community organizations, and government representatives, were contacted individually by phone and email about the plan and key events during the planning charrette. A project website, located on the City of Fayetteville’s website, provided background information about the study area and details about the planning charrette events. Tailored press releases were distributed to local media outlets, and a public service announcement was drafted and distributed to local radio stations to further advertise the Charrette to the public. Finally, members of the project team went door-to-door to businesses along Bragg Boulevard, hand-delivering postcards to advertise the plan and key participatory events during the Charrette.

## Steering Committee

As noted in Chapter 2, members of the Bragg Boulevard Corridor Plan Steering Committee included representatives of government agencies, private businesses, educational institutions, and other key stakeholder groups directly involved in the future development of Bragg Boulevard. This group met three times during the planning process. The first meeting took place on Tuesday, June 5, where the project team introduced the project and background







information, defined the roles and responsibilities of the Steering Committee, and reviewed drafts of the first two project deliverables: the Land Use, Economic, and Community Characteristics Report, and the Transportation and Access Report.

The second Steering Committee meeting, held on June 11, opened a three-day planning Charrette for the Bragg Boulevard Corridor Plan. Members of the steering committee worked with other invited stakeholders and the project team to establish a vision and goals for Bragg Boulevard. These goals guided the entire Charrette process, where participants contributed ideas for transforming Bragg Boulevard in ways that would achieve the overarching goals for the corridor. The corridor goal statements are presented later in Chapter 5.

The third and final Steering Committee meeting took place on Thursday, June 14, following the end of the planning Charrette. Members of the Steering Committee reviewed and discussed the results of the Charrette with the project team, and shared their feedback on the draft alternative concepts and recommended concept that were developed during the Charrette.

### Planning Charrette

The project team held a four-day planning Charrette in downtown Fayetteville to engage the public, local officials, the business community, and other stakeholders in the development of the Bragg Boulevard Corridor Plan. The Charrette began with a Kick-off Public Workshop on the evening of Monday, June 11, where project staff introduced the Bragg Boulevard Corridor Plan to stakeholders and members of the public, summarized existing conditions, and solicited feedback about areas of interest and concern along the Boulevard.

Over the next two days, members of the public were welcome to attend a series of three open Pin-up Sessions, where they could observe the plan as a work-in-progress, including maps, mock-ups, and other exhibits. In addition, stakeholders participated in eight Focus Group sessions, each dedicated to a specific topic relating to Bragg Boulevard, including land use, cultural activities, access management, and bicycle and pedestrian activity. Throughout this process, designers and planners on the project team drafted alternative concepts for the Boulevard based on the ideas shared during the Charrette.



The Charrette concluded on Wednesday evening, June 13, with a Closing Public Presentation. The project team reviewed the goals of the planning Charrette, summarized the previous three days of activity, and presented three alternative concepts and the final recommended concept for the Bragg Boulevard Corridor Plan. Following the formal presentation, attendees had the opportunity to review maps, sketches, and other products of the Charrette, and members of the project team were on-hand to discuss the results of the Charrette, take additional comments, and answer any questions about the plan.





### Feedback Tools and Technologies

The project team used a variety of tools to engage project participants and solicit ideas and feedback about the plan. The project team conducted one-on-one interviews with local officials and community leaders in the study area, asking detailed questions about priority issues for Bragg Boulevard, development patterns and trends, transportation concerns along the corridor, and potential programs and tools to foster redevelopment of the Boulevard.

The four-day planning charrette included several interactive planning exercises that allowed participants to identify priority issues, locations of concern, and specific ways to transform the character of Bragg Boulevard. Focus groups and pin-up sessions provided participants the opportunity to be creative, respond to the proposed designs of the project team, and share their own ideas about Bragg Boulevard. The feedback from these participatory sessions then informed the next rounds of designs and

alternatives, reinforcing the productive feedback loop of the Charrette.

Attendees also submitted comment forms throughout the Charrette, responding to specific questions about Bragg Boulevard with regard to transportation, businesses, and physical appearance. In addition to structured comment forms, participants could provide more open-ended feedback using “Idea pads” distributed at each event, with space included for unprompted, free form comments and idea-sharing, as well as space to literally sketch out what they would like to see on Bragg Boulevard.

Finally, the project team used an online tool called Mappler, which participants accessed online using their smart phone or personal computer. Mappler is an easy-to-use interactive mapping application that participants can use to “tag” specific points in the study area. Users can add data to each point, such as photographs of specific features or comments about that location. The project team created a Mappler website for the project site, and provided demonstrations of the tool throughout the Charrette. Users can continue to add feedback about Bragg Boulevard using Mappler, and preliminary data from the tool have also been included in this report.



### Corridor Challenges and Opportunities

Bragg Boulevard connects downtown Fayetteville, a burgeoning redevelopment area, with Fort Bragg, the main economic engine for much of southeastern North Carolina. Recent public and private investments along the corridor are indications of its importance to the local economy and the City’s commitment to pursuing quality redevelopment opportunities. Together with the proximity of the corridor to I-95, as well as US 401 and the soon to be completed I-295, Bragg Boulevard has the potential needed to mature as a social and economic artery of the Fayetteville-Cumberland County region.

To achieve corridor objectives, there are issues to address with the adequacy of existing transportation infrastructure along much of Bragg Boulevard throughout the study area. Access management issues and traffic congestion impact the overall safety along the corridor and there are limited options for multimodal transportation (pedestrians, bicycles, and transit). In addition, the physical appearance of the landscape and streetscape along Bragg

Boulevard, coupled with community perceptions, create the need for the City to develop a framework and provide support to attract the development community to make the quality investments needed to transform the corridor.

To enhance development along Bragg Boulevard in a manner that will support increased transit service and provide for more destinations and community gathering places, it will be important to not only craft an overall vision for the corridor, but also to identify specific locations that could serve as catalysts for quality growth and redevelopment. The Bragg Boulevard Corridor Plan process has worked to identify those locations and recommendations through the active participation of residents, business/property owners, the development community, government staff, and other stakeholders along the corridor. This evaluation requires a thorough review of the potential barriers to achieving the desired vision of a vibrant transit-oriented corridor and a thorough assessment of the opportunities to leverage existing and emerging resources to realize the corridor vision, specifically associated with community, economic, transportation, and natural resources, alternative growth scenarios can be evaluated in order to provide for an implementable and sustainable redevelopment strategy. Some of the challenges and opportunities identified by the project team, Steering Committee, stakeholders, and community members are presented below.

**Challenges**

- Access management issues (e.g. medians that restrict turns at some locations)
- Lack of diversification in local/corridor economy
- Physical appearance of corridor and existing structures (e.g. dated appearance, lack of uniform appearance standards, excessive signage, unattractive streetscapes)
- Perceptions of corridor character and image
- Perceived cost and difficulty of redevelopment relative to new development
- Limited connections to surrounding neighborhoods
- Lack of basic multimodal infrastructure (sidewalks, crosswalks, bicycle lanes, transit service and amenities, etc.)
- Limited ADA accessibility, particularly at crosswalks
- Income levels/purchasing power of surrounding residential development
- Insufficient parking at some businesses
- Presence of abandoned buildings
- Regulations that are perceived as “halting growth”

**Opportunities**

- Strong and increasing employment base – Fort Bragg
- City support for reinvestment
- Surrounding transportation network and connections
- High traffic volumes to support businesses
- Stable neighborhood base
- Educational institutions and amenities
- Open space, parks, and potential for future greenway connections
- Potential for green space to improve appearance
- Potential for ordinances, developer incentives, special tax districts, public-private partnerships, and zoning to transform the corridor
- Current sidewalk efforts by FAMPO





In accordance with goals for this plan, recommendations have been developed for facilities and services to enhance access to and travel by transit, bicycling, and walking along Bragg Boulevard. Continued redevelopment in the corridor is vital to help facilitate increases in multimodal use and enhanced transit can support the redevelopment process. These goals and the strategies to support them will be further explored in Chapters 6 and 7 of this plan.

**Corridor Vision and Goals**

During the Bragg Boulevard Corridor Plan charrette, Steering Committee members and other key stakeholders were engaged in an interactive Goals and Visioning session to define a vision for the corridor and to develop associated goals and performance measures. Through hands-on activities and facilitated discussions, participants defined the following goal statements for the Bragg Boulevard Corridor Plan:

- Promote multimodal transportation choices, including travel by bus, bike, and foot
- Improve mobility while offering more efficient access to corridor destinations
- Improve the safety and visual character of Bragg Boulevard
- Create vibrant mixed-use places where people want to live, work, and play
- Improve the form and appearance of existing developed properties
- Use green space to enhance the look, feel, and function of Bragg Boulevard
- Implement well-designed and well-placed signage to transform Bragg Boulevard into an aesthetically pleasing corridor
- Develop collaborative partnerships to implement a shared vision for redevelopment

Additionally, participants provided feedback on initial “measures of success” to support the corridor goals and to track implementation and outcomes over time. As the recommendations outlined in this Corridor Plan are implemented, this list of preliminary measures will be expanded and refined to reflect how strategies and outcomes will be evaluated. Together, the results of the Goals and Visioning session have formed the basis of Corridor Plan concepts and recommendations. A full summary of the session activities and results, including specific ideas and performance measures, can be found in the Appendix.

**Summary of Stakeholder and Community Comments**

This section summarizes the stakeholder and community comments received for the Bragg Boulevard Corridor Plan. Input was collected in a variety of ways, including comment forms, interviews, focus group discussions, interactive mapping exercises, email, and one-on-one conversations at the charrette. Comments were received for a variety of issues, with most comments relating to transportation along the corridor and the visual character of Bragg Boulevard. The main categories of public comments are summarized below, while a detailed summary can be found in the Appendix.

The largest number of comments addressed **multimodal travel and accessibility** along Bragg Boulevard. Respondents identified barriers to walking, biking, and using transit along the corridor, and suggested ways to improve travel options on the Boulevard. Several respondents highlighted **pedestrian safety** on Bragg Boulevard as a top concern. Respondents agreed that several elements pose significant challenges to safe walking on Bragg Boulevard, including gaps in the sidewalk network, narrow sidewalks, lack of crosswalks and pedestrian signals at most intersections, concerns about

accessibility at intersections and crosswalks, a disconnect between bus stop locations and pedestrian infrastructure, inadequate street lighting, and the proliferation of driveways along the Boulevard. These issues, in addition to the presence of heavy traffic and the lack of a bike lane or other safe infrastructure, were also identified as barriers to **bicycle safety** along the corridor.

Many respondents indicated a need for more **transit** on Bragg Boulevard, with specific requests including direct service between Fort Bragg and Downtown Fayetteville. Improvements to existing transit infrastructure were called for, including more shelters, benches, and improved pedestrian infrastructure at bus stops. The location and improvement of crosswalks near bus stops would also improve safety for transit users along the corridor. Through focus groups, interactive mapping exercises, and interviews with key stakeholders, a number of locations were identified as potential nodes for transit-supportive, mixed-use development, indicating the potential for enhanced transit service while meeting some of the corridor’s other goals.

Respondents emphasized that **streetscaping and landscaping** are key issues for Bragg Boulevard. Several respondents cited a need to improve the physical appearance and character of the corridor using landscaping, street trees, and enhanced sidewalks. Such strategies were also recommended for the purpose of improving the pedestrian environment and promoting a safer travel environment, for example, enhancing sidewalks and providing landscaped buffers between the sidewalk and roadway. The visual appearance of the corridor was sometimes described as “cluttered”, and respondents suggested removing utility poles, undergrounding utility wires, and regulating or banning billboards on the corridor.

**Property upkeep and appearance** on the corridor was another popular topic for respondents, and was identified as a crucial component for improving both the physical appearance of the corridor and people’s perceptions of Bragg Boulevard. Respondents expressed concern about run-down or abandoned buildings and blighted properties along the corridor, and indicated a need for greater accountability on the part of property owners for the condition and appearance of their buildings.

Respondents stated that **access management** was another challenge for the corridor, with several indicating that the proliferation of business driveways poses a challenge for pedestrians and bicyclists on Bragg Boulevard, as well as implications for driving safety and street design. A number of respondents expressed an interest in seeing more planned **mixed-use development** along Bragg Boulevard. Throughout interviews, focus groups, and mapping activities, respondents identified key areas that would be well suited to focusing mixed-use, transit-supportive development on the corridor.

Furthermore, many respondents indicated that **access to businesses** is a concern along the corridor. Some expressed specific concern that the conversion of center turn lanes to medians has posed challenges to attracting customers. Some respondents indicated concerns about **crime and personal safety** along the corridor, and identified particular locations that may pose challenges for personal safety when walking or bicycling along the corridor. **Crashes** were identified as another key transportation issue on Bragg Boulevard by a number of respondents, indicating concerns with vehicular speed and roadway design along the corridor.

Additionally, some respondents raised issues related to congestion, environmental concerns, and parking. Some indicated that congestion is an issue on the corridor, acknowledging that while it is not a concern along most of Bragg Boulevard, it is a growing issue on the northern end of the corridor and around Fort Bragg. Respondents noted that much of the study area is located within a watershed. A number of respondents noted insufficient parking at some businesses along the corridor.

All stakeholder and community comments were incorporated into the development of a recommended alternative concept, as presented in Chapters 6 and 7.

# 6.0 ALTERNATIVE CONCEPTS

Three alternative land use and transportation concepts were evaluated for the Bragg Boulevard corridor. Alternative Concept #1 assumes that the land use character and nature of transportation service along Bragg Boulevard continues as it has during the last few decades. Alternative Concept #2 promotes the use of Bragg Boulevard as a Strategic Highway whose main priority is to move traffic as efficiently as possible through the corridor. Alternative Concept #3 incorporates the vision and goals identified during the stakeholder and community outreach process, and encourages multiple modes of transportation and more of a high-density nodal development pattern.



## Alternative Concept #1: Existing Trends

In the Existing Trends concept, Bragg Boulevard would primarily serve as a local thoroughfare providing unlimited access points to properties, and with adjacent businesses almost exclusively dependent upon the automobile. Although current business operations are stable and traffic flow is manageable, continued growth and development in this pattern could contribute to unacceptable traffic safety conditions, insufficient pedestrian/bicycle infrastructure to support multimodal mobility and access, and limited opportunities for streetscaping and the improvement of the physical appearance of the corridor.

### Development Concept

Land development for the Existing Trends Concept will be regulated by the existing Unified Development Ordinance (UDO) and its designated zoning district regulations. Currently, the UDO allows for a mix of uses within some of its zoning districts. However, most developers minimize their costs by adhering to the minimum requirements within each zoning category.

With unlimited access to Bragg Boulevard, development along the corridor will continue to be “strip” in nature, with limited variation in densities. This type of development pattern does not support the concentration of uses in specific locations, generating the need for an increase in the number and length of vehicular trips along the corridor and contributing to traffic congestion and safety concerns. This development pattern also fosters the need for expansive utilities infrastructure to serve the development along the corridor.





The population/residential and employment/ commercial forecasts presented in Chapter 3 of this report reflect the continuation of the Existing Trends Concept for Bragg Boulevard. Without proposing an alternate land development pattern and/or transportation system, it is projected that the traffic analysis zones (TAZ) that encompass the Bragg Boulevard study area would accommodate an additional 5,000 residents between 2006 and 2035, or 172 per year. Housing units equate to an additional 2,500, or an average of 86 per year.

**Corridor Character/Elements**

Under this concept, the development of Bragg Boulevard will continue to emphasis unlimited access to adjacent properties, limited variations in uses and densities along the corridor, and vehicle-oriented design and function. The implications of this scenario may include a decreased sense of place and community identity/cohesion for Fayetteville residents, particularly as establishments continue to primarily serve visitors along the corridor rather than local residents and neighborhoods.

Typical corridor elements under this concept include:

- Free-standing, single-use structures with large asphalt parking lots
- Buildings that adhere to minimum levels in terms of design and visual quality
- Widely varying business signage that dominates the landscape
- High number and proportion of vehicular trips
- Wide, multilane roadway
- Extensive curb cuts with greater potential for vehicle/pedestrian conflicts
- Narrow sidewalks with limited pedestrian amenities, if sidewalks are present at all
- Intersections with multi-phased signals that primarily require two left-turn pockets, which widens the pedestrian crossing distance
- Minimal social interaction
- Limited multimodal infrastructure potential
- Potential physical barrier between land uses and neighborhoods within corridor
- Current and future residential and commercial densities insufficient to support enhanced transit system

**Existing Trends  
Goal Evaluation & Concept Summary**

*Evaluation of Corridor Goal*

- Promote multimodal transportation choices, including travel by bus, bike, and foot
- Improve mobility while offering more efficient access to corridor destinations
- Improve the safety and visual character of Bragg Boulevard
- Create vibrant mixed-use places where people want to live, work, and play
- Improve the form and appearance of existing developed properties
- Use green space to enhance the look, feel, and function of Bragg Boulevard
- Implement well-designed and well-placed signage
- Develop collaborative partnerships to implement a shared vision for the corridor

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*Summary*

Certain aspects of the current development and transportation pattern along Bragg Boulevard are positive, including the sufficiency of retail services, street network connectivity, and overall traffic mobility. However, it has been determined based on community and stakeholder input that Bragg Boulevard is in need of improvement associated with the conditions described in this section. The strategy of allowing Bragg Boulevard to continue to develop as it has been over the past few decades—with strip commercial development, limited access management, land uses catering primarily to a specific demographic, vehicular-dominated travel, and continued deterioration of public infrastructure and private investment—is not the recommended alternative for the corridor.

- Corridor uses primarily cater to Fort Bragg personnel rather than local neighborhoods

#### **Concept Feasibility**

A feasibility review for the Existing Trends concept along Bragg Boulevard is not required, as it is merely a continuation of the land use and transportation environment that currently exists. However, a continuation of this type of development pattern, consisting of primarily single-use buildings, expansive surface parking, and unlimited driveway access, will not only generate less tax revenue and escalate infrastructure costs for the City, but will also increase the potential for traffic accidents as most trips within the corridor will require a vehicle.

Alternative Concept #2: Strategic Highway

The Strategic Highway concept is focused on moving traffic as efficiently as possible along Bragg Boulevard. This concept is consistent with the North Carolina Department of Transportation’s (NCDOT) designation of Bragg Boulevard as a higher mobility, higher speed facility, currently designated as an expressway.

Access management is the critical component of a strategic highway corridor. Bragg Boulevard currently provides uncontrolled access to adjacent land uses. If implemented fully to the current expressway designation, the conversion of the corridor to a primarily controlled access facility would have significant land use implications.

Development Concept

Land use and development is secondary to traffic mobility under this concept, especially if the expressway designation were fully implemented. Most uses along an expressway are highway-oriented including gas stations, hotels, convenience restaurants, etc. These uses tend to cluster around the major intersections/interchanges where full access is provided. Unless located along an intersecting roadway adjacent to Bragg Boulevard, strip retail, including uses such as shopping centers and automobile dealerships, would not be as successful along a fully developed expressway facility compared to a Boulevard or thoroughfare facility due to their need for larger lots, substantial parking requirements, and full access vehicular movements.

Corridor Character/Elements

In an urban/suburban setting such as Bragg Boulevard, a strategic highway corridor developed as an expressway would not have fully controlled access, but rather would allow right-in, right-out and cross-over left turning movements (see Figure 6-1 on the next page). Driveway access for land uses located along Bragg Boulevard developed as an expressway would primarily be to service roads either in front or behind the buildings. In some cases, vehicles traveling along Bragg Boulevard that want to turn left at an intersecting street may be able to do so utilizing a directional crossover turning movement. Periodic median U-turns could also be utilized for left turns.

Strategic Highway Corridor  
Goal Evaluation & Concept Summary

Evaluation of Corridor Goal

- Promote multimodal transportation choices, including travel by bus, bike, and foot ☐
- Improve mobility while offering more efficient access to corridor destinations\* ☒
- Improve the safety and visual character of Bragg Boulevard\*\* ☒
- Create vibrant mixed-use places where people want to live, work, and play ☐
- Improve the form and appearance of existing developed properties ☐
- Use green space to enhance the look, feel, and function of Bragg Boulevard ☐
- Implement well-designed and well-placed signage to transform Bragg Boulevard into an aesthetically pleasing corridor ☐
- Develop collaborative partnerships to implement a shared vision for redevelopment ☐

Summary

It is the recommendation of the consultant team that this alternate concept either is eliminated or that Bragg Boulevard through this area is reclassified under the NCDOT Strategic Highway Network from an expressway to a “Boulevard” strategic highway that allows additional access to the roadway. See recommendations section for description of the “Boulevard” Strategic Highway concept, which is the preferred highway designation for the Bragg Boulevard corridor.

\* Likely would improve vehicular mobility

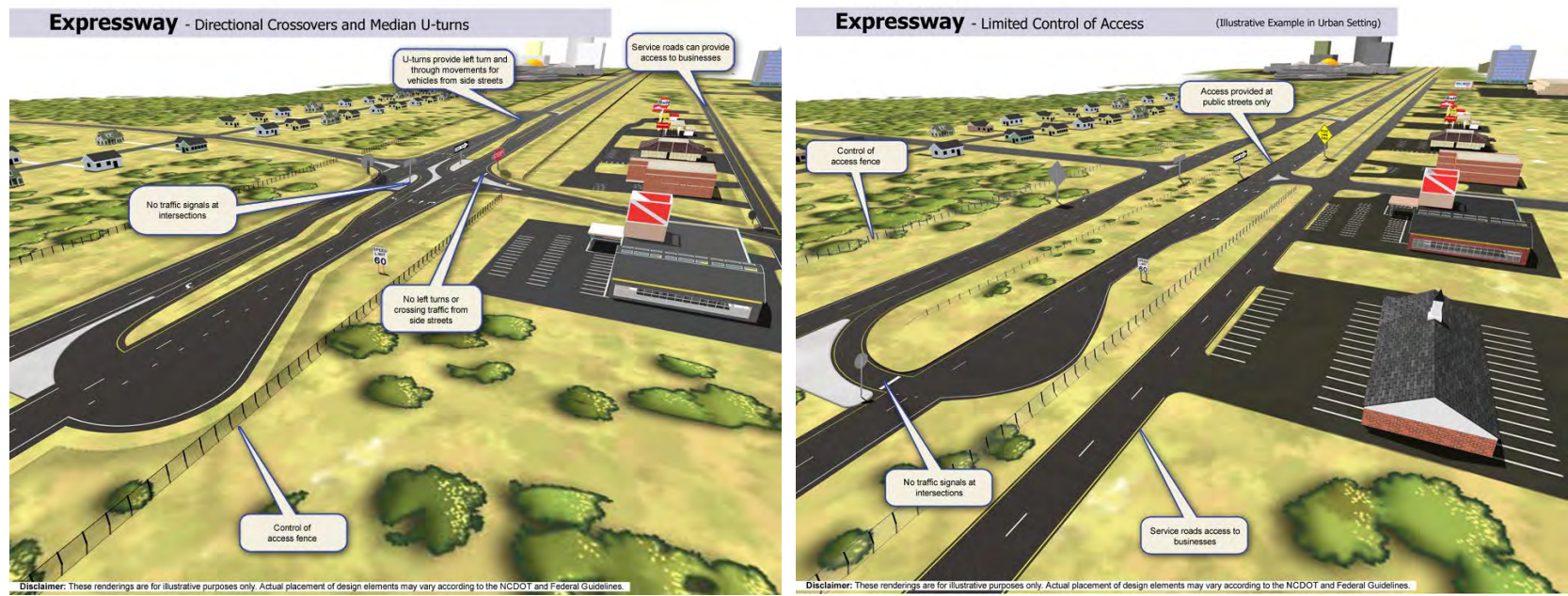
\*\* Likely would improve vehicular safety



The following are some general characteristics of a strategic highway corridor **expressway** designation:

- Emphasis on mobility and reduction of travel time
- Less emphasis on accessibility
- High-speed operation, with speed limits ranging from 45 up to 60 mph
- Minimum 4 lanes with median
- Potential introduction of additional grade-separated interchanges for major cross streets (similar to Skibo Road/Pamalee Drive interchange) and elimination of traffic signals
- At-grade intersections for minor cross streets; minor cross street traffic must turn right, then access a U-turn to proceed in the desired direction
- Limited/no pedestrian or bicycle travel
- Limited/no driveway access

Figure 6-1: NCDOT Expressway Illustrative Diagrams



Source: NCDOT Strategic Highway Corridors Initiative Website



Source: NCDOT Strategic Highway Corridor Website

Impacts to land use along Bragg Boulevard would be substantial if an expressway concept was developed. Without full access to Bragg Boulevard, many highway-oriented businesses would suffer loss of customers and potential closure. Retail uses depend upon traffic signals and acceptable levels of traffic congestion for their livelihood. This type of transportation facility would also restrict pedestrian or bicycle travel along Bragg Boulevard, which was a high priority for stakeholders and the general public. In general, the vision expressed for Bragg Boulevard, which encourages transportation infrastructure for multiple modes of travel while fostering the development of adjacent land uses, is not consistent with an expressway-design of a strategic highway corridor.

Concept Feasibility

Based on the existing development patterns along Bragg Boulevard, which include numerous businesses that have direct access (multiple curb cuts) to the roadway and, in many cases, no other access points, it would be detrimental to the local economy to implement an almost fully-controlled access facility. In addition, the financial burden of acquiring additional right-of-way for potential service roads and other necessary infrastructure improvements would make it cost-prohibitive for the City of Fayetteville and NCDOT.

Boulevard Designation

A Boulevard designation for Bragg Boulevard would provide for a balance of traffic mobility and land access along the corridor. The following are characteristics of a typical Boulevard strategic highway corridor.

- Functional Purpose: Moderate Mobility, Low to Moderate Access
- AASHTO Design Classification: Arterial or Collector
- Posted Speed Limit: 30 mph to 55 mph
- Functional Purpose: Moderate Mobility, Low to Moderate Access
- Posted Speed Limit: 30 mph to 55 mph
- Control of Access: Limited, Partial, or None
- Driveways:  
*Limited Control of Access* - Not Allowed  
*Partial Control of Access* - One Driveway Connection per Parcel; consolidate or Share Driveways and Limit Access to Connecting Streets or Service Roads; restrict to Right-in/Right-out
- Cross-Section: Minimum 2 Lanes with a Median
- Control of Access: Limited, Partial, or None
- Traffic Signals: Allowed
- Connections: At-Grade Intersections for Major and Minor Cross Streets (Occasional Interchange at Major Crossing); Use of Acceleration and Deceleration Lanes
- Median Crossovers: Allowed; Minimum Spacing between All-Movement Crossovers is 2000 feet (posted speed limit of greater than 45 mph) or 1200 feet (posted speed limit of 45 mph or less)
- Examples: US 70 between Clayton and Smithfield, US 70 near Havelock, NC 24 (Harris Boulevard) in Charlotte, US 1 (Capital Blvd) in Raleigh, US 74 through Monroe, US 117 south of Goldsboro, US 70 east of Goldsboro, Cary Parkway, NC 132 (College Road) in Wilmington, Lochmere Drive in Cary, US 74 in Ranger



Source: NCDOT Strategic Highway Corridors Initiative Website

Alternative Concept #3: Activity Center and Multimodal - *RECOMMENDED*

The concept for the Activity Center and Multimodal alternative for Bragg Boulevard was determined based on the results of Steering Committee, interested stakeholder, and general public input/feedback. The overall land use recommendations reflect an organization around activity centers/transit hubs that are tied to a public transit option that is specifically designated for the corridor. This preferred transit option is discussed in greater detail within this report, yet is shown graphically by the bold blue line running the length of the corridor in Figure 6-2 on the following page.

Indicated by large asterisks, there are eight designated activity centers along Bragg Boulevard as identified in Figure 6-2. These proposed centers are locations where development momentum is already starting to take place or where past history indicates that the location resonates with the community as a hub of activity for future development. Activity centers are no more than 1 mile apart and are on average ¾ of a mile apart. There are also many greenway and bike lane links that are proposed throughout the corridor study area that help to create a layered, community-based multimodal system. A less preferred alternative bus route connection is illustrated moving west from the Santa Fe Drive/Bragg Boulevard transit stop toward Fort Bragg along Santa Fe Drive and into the Yadkin Gate where Fort Bragg has discussed the creation of a bus turnaround. A new “cross-town” bus route is also shown with a blue dashed line connecting the Murchison Road area to the Cross Creek Mall area – providing an additional link between the residents and shopping amenities.

Activity Center and Multimodal  
Goal Evaluation & Concept Summary

Evaluation of Corridor Goals

- Promote multimodal transportation choices, including travel by bus, bike, and foot ☒
- Improve mobility while offering more efficient access to corridor destinations ☒
- Improve the safety and visual character of Bragg Boulevard ☒
- Create vibrant mixed-use places where people want to live, work, and play ☒
- Improve the form and appearance of existing developed properties ☒
- Use green space to enhance the look, feel, and function of Bragg Boulevard ☒
- Implement well-designed and well-placed signage to transform Bragg Boulevard into an aesthetically pleasing corridor ☒
- Develop collaborative partnerships to implement a shared vision for redevelopment\* ☒

Summary

After documenting existing land use and transportation conditions, obtaining focused input from identified stakeholders along the corridor, hearing from the general public, and conducting an evaluation of potential solutions, it has been determined that the recommendations proposed as part of the Activity Center and Multimodal concept should be implemented along the Bragg Boulevard corridor. This concept could work in conjunction with a revised “Boulevard” strategic highway corridor designation. See the Development Concepts and Corridor Character/Elements sections for detailed description of the land use and transportation characteristics for this scenario.

*\* Recommended as a part of Implementation Strategies in Chapter 7*





### Development Concept

Adjacent development along the Bragg Boulevard corridor under the Activity Center and Multimodal Concept would primarily include buildings fronting the roadway with parking to the rear. As will be described in more detail in the next section, the general development concept is focused on a nodal development pattern with higher-density development within designated activity centers and lower-density land uses between the activity centers. The design of the roadway should accommodate this development pattern, with more median breaks within activity centers and fewer median breaks outside of them. All activity centers should accommodate the vehicle, bicycle, pedestrian and transit service, with the interaction of all modes in an integrated design. Although the level of recommended access would vary by activity center, the primary focus within activity centers would be more so on adjacent development access and less on traffic mobility, whereas the opposite would be the case outside of these areas.

In the design and configuration of land uses along Bragg Boulevard as part of the Activity Center and Multimodal concept, higher-intensity uses would be encouraged within the designated activity centers, while lower-density and supportive uses would be located between activity centers.

Mixed-use and multi-tenant structures will be encouraged within activity centers, connected by wide sidewalks and narrower street cross-sections more conducive to pedestrian mobility. Buildings would be encouraged to front Bragg Boulevard with parking in the rear. Possible shared parking for multiple uses would be recommended. The range of residential and commercial densities within activity centers would be determined by market demand.

### Corridor Character/Elements

The following is the preferred designation for the eight recommended activity centers located along the Bragg Boulevard corridor. Detailed descriptions of the land use and transportation elements within each type of activity center are provided in a series of profile sheets starting on the following page.

- **Rowan Street** – Urban Village Center
- **Ames Street** – Mixed Use Center
- **Pilot Avenue** – Residential Center
- **Eutaw Village** – Retail Center
- **Sycamore Dairy Road** – Retail Center
- **Villagio** – Neighborhood Village Center
- **Bonnie Doone** – Retail Center
- **Santa Fe Drive/Shaw Road** – Employment Center



# ROWAN STREET | URBAN VILLAGE CENTER

## Concept Plan

The intersection of **Rowan Street** and Bragg Boulevard is generally thought of as the beginning of the Bragg Boulevard corridor. The impending Rowan Street bridge relocation will provide for additional land to accommodate the second phase of Veterans Park and place even more emphasis on the West Rowan Street corridor, including its intersection with Bragg Boulevard. Furthermore, because of the West Rowan Street/Bragg Boulevard intersection's proximity to historic/cultural resources, urban residential neighborhoods, and the proposed mixed-use development on the former Days Inn site, it is primed to serve as a pedestrian-friendly gateway to downtown Fayetteville.

The City is pursuing a request for proposal for a mixed-use developer/development for the City-owned parcel just west of the Special Operations Museum, which will help spur growth into several smaller parcels just north along both sides of Bragg Boulevard as well as along the north side of the reconfigured Rowan Street. This center can also serve as a great bike/pedestrian gateway as the Haymount Neighborhood begins to use the proposed bike collector into downtown and connecting with the Cross Creek Greenway.

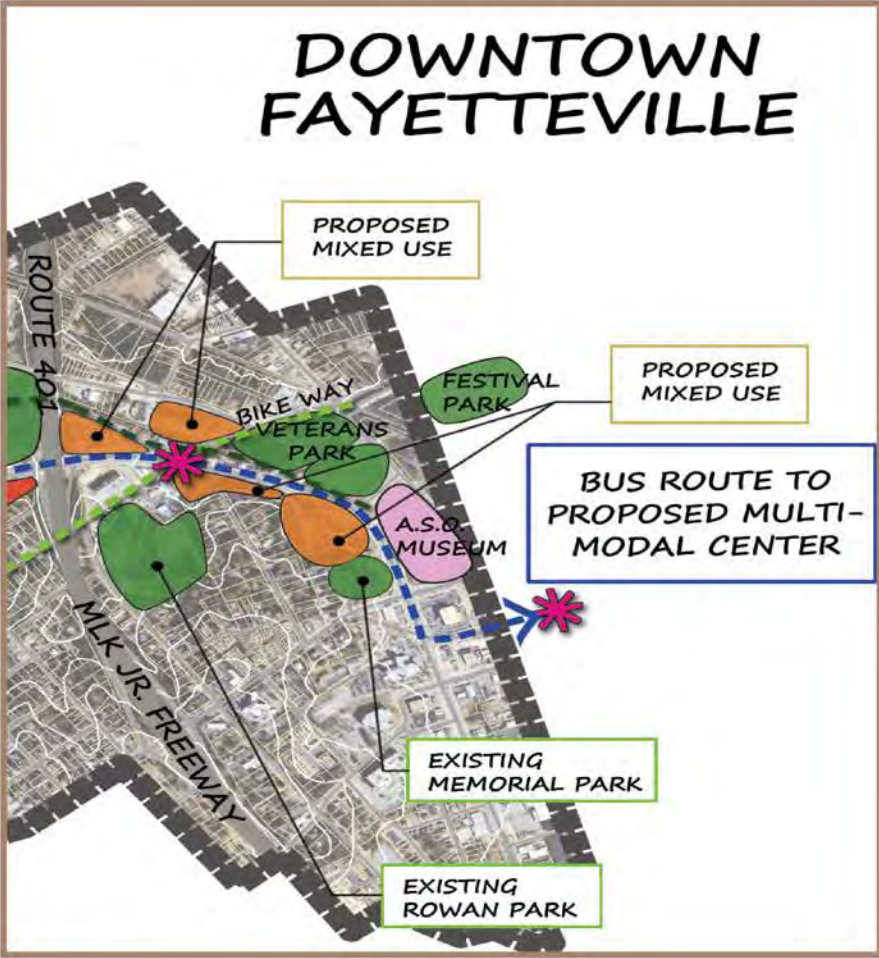
### Other Elements

- > Proposed greenway to Fayetteville State University planned campus expansion

### Urban Village Center Characteristics

- > Land uses include high-density residential (condominiums, apartments), retail, office, civic, and parks/open space
- > Includes primarily mixed-use structures up to four stories (with ground-floor retail and office/residential above)
- > Sidewalks and bike lanes on both sides of the street
- > Planted median optional
- > Pedestrian-scale lighting
- > On-street parking

### Example Urban Village Center





# AMES STREET | MIXED USE CENTER

## Concept Plan

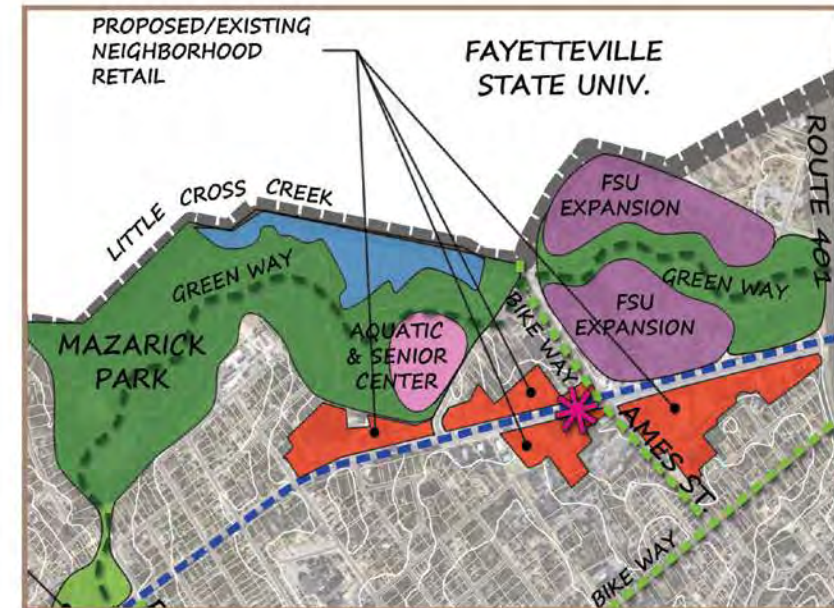
The Ames Street Mixed Use Center provides an exciting opportunity for community connectivity and multi-generational living. The City is currently pursuing the movement of the closely located Senior Center to this area as part of the proposed Aquatic Center. Linking these community assets along Filter Plant Drive with connections to Mazarick Park and downtown via the Cross Creek Greenway will allow for unique synergy in this center. In addition, there is a proposal to have Fayetteville State University (FSU) to acquire the large and mostly vacant parcels that encompass most of the land between Bragg Boulevard, Ames Street, and Murchison Road. FSU's proposal includes increased housing stock for their students and a hotel/conference center. This section of Bragg Boulevard also has a burgeoning pocket of locally owned and neighborhood-oriented businesses that could be enhanced and promoted – with existing and future uses such as dentists, salons, neighborhood pubs, sandwich shops, etc.

### Mixed Use Center Characteristics

- > Land uses include medium- to high-density residential (townhouses, condominiums, apartments), retail, institutional, office, lodging, and parks/open space
- > Includes mix of one-story, single-use structures and mixed-use structures of two to three stories (with ground-floor retail and office/residential above)
- > Center turn lane
- > Sidewalks on both sides of street
- > Pedestrian-scale lighting

### Other Elements

- > Proposed greenway through FSU planned campus expansion connecting to Aquatic/Senior Center
- > Bikeway along Ames Street between Rowan Street and the proposed greenway, as well as along Rowan Street through Haymount residential community to Fort Bragg Road
- > Improved pedestrian crossings at Bragg Boulevard to facilitate safe bicycle and pedestrian connectivity



Example  
Mixed Use  
Center



# PILOT AVENUE | RESIDENTIAL CENTER

## Concept Plan

The Pilot Avenue Residential Center would enhance neighborhood links for the residents within this section of the corridor study area. This area is the only section along Bragg Boulevard that “looks and feels” residential, with many single-family homes located within one mile of this hub. By providing a small neighborhood hub and a proposed public open space to link bicycle and pedestrian routes back to Mazarick Park and the future Cross Creek Greenway, the Pilot Avenue Activity Center will allow for multiple layers of connectivity via all modes of transportation. Plans are currently in place to extend the greenway from Mazarick Park westward along Cross Creek. While these plans may be in conflict with watershed requirements, the concept for this activity center supports the future greenway if it is able to be developed.

### Example Residential Center



### Residential Center Characteristics

- > Land uses include medium- to high-density residential (primarily single-family and townhouses), parks/open space, and single story office
- > Includes primarily single-use structures
- > Sidewalks on both sides of the street
- > Planted median

### Other Elements

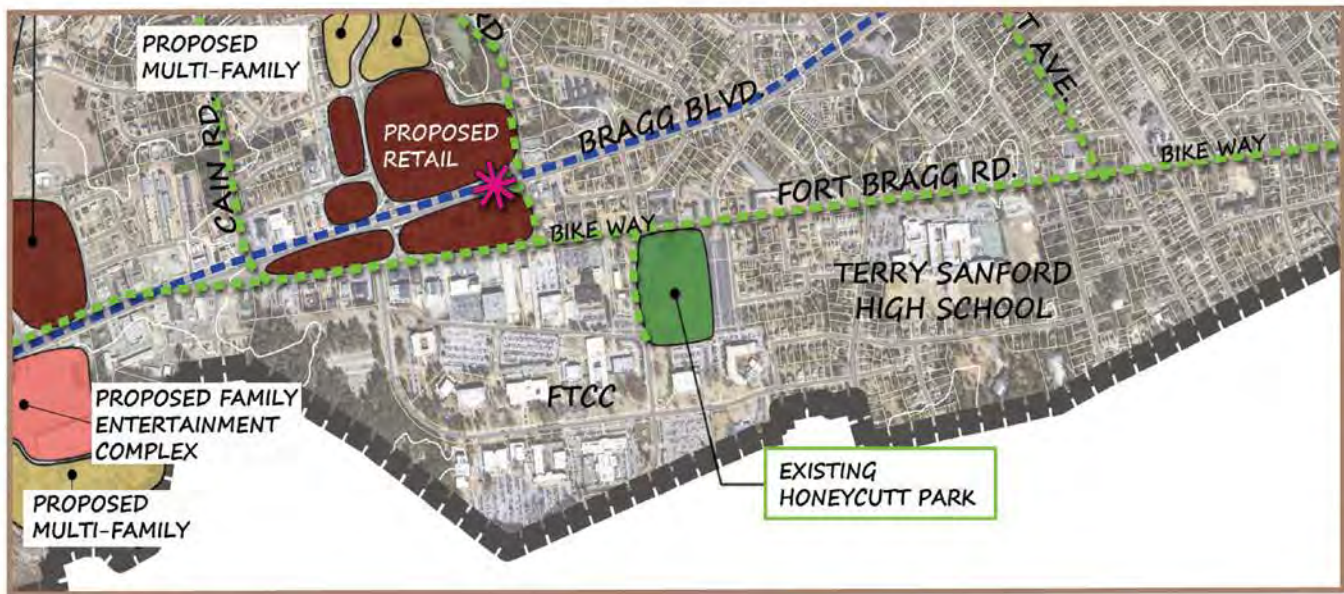
- > Proposed bike route/path along Pilot Avenue between Fort Bragg Road and the proposed park
- > Proposed pocket park at Bragg Boulevard connecting to Mazarick Park
- > Proposed bike route/path along Fort Bragg Road





# EUTAW VILLAGE | RETAIL CENTER

## Concept Plan



Eutaw Village is the earliest and most recognizable commercial center along the Bragg Boulevard corridor. Traveling north and west from Downtown, this is where “old Fayetteville” ends and the more recent development of Bragg Boulevard begins. This area is still a very significant draw for shoppers from all of Fayetteville, but particularly for the residents within the corridor study area.

The goal of the proposed land uses and pedestrian improvements in this area is to provide better links between Eutaw Village, Fayetteville Technical Community College (FTCC), Honeycutt Park, Terry Sanford High School, and all of the surrounding activities. As an activity center, the shopping center can reposition itself into a more updated retail experience that may allow for more density along street edges and more pedestrian-friendly connections to the surrounding neighborhoods and future transit services. There are also several larger vacant parcels behind the shopping center (fronting on Elm Street) that are owned by the shopping center. These parcels could be developed as high-density residential to provide housing supportive of expanded retail and enhanced transit services.

Example Retail Center



Eutaw Village Today



### Other Elements

- > Proposed bike routes/paths along Fort Bragg Road and Stamper Road
- > Improved pedestrian crossings at Bragg Boulevard to facilitate safe bicycle and pedestrian connectivity

### Retail Center Characteristics

- > Land uses include retail, office, family entertainment, and lodging; supporting medium-density residential uses off Bragg Boulevard
- > Includes primarily single-use structures, but mix of single and multi-tenant occupancy
- > Sidewalks and bike lanes on both sides of the street
- > Planted median optional



# SYCAMORE DAIRY ROAD | RETAIL CENTER

## Concept Plan

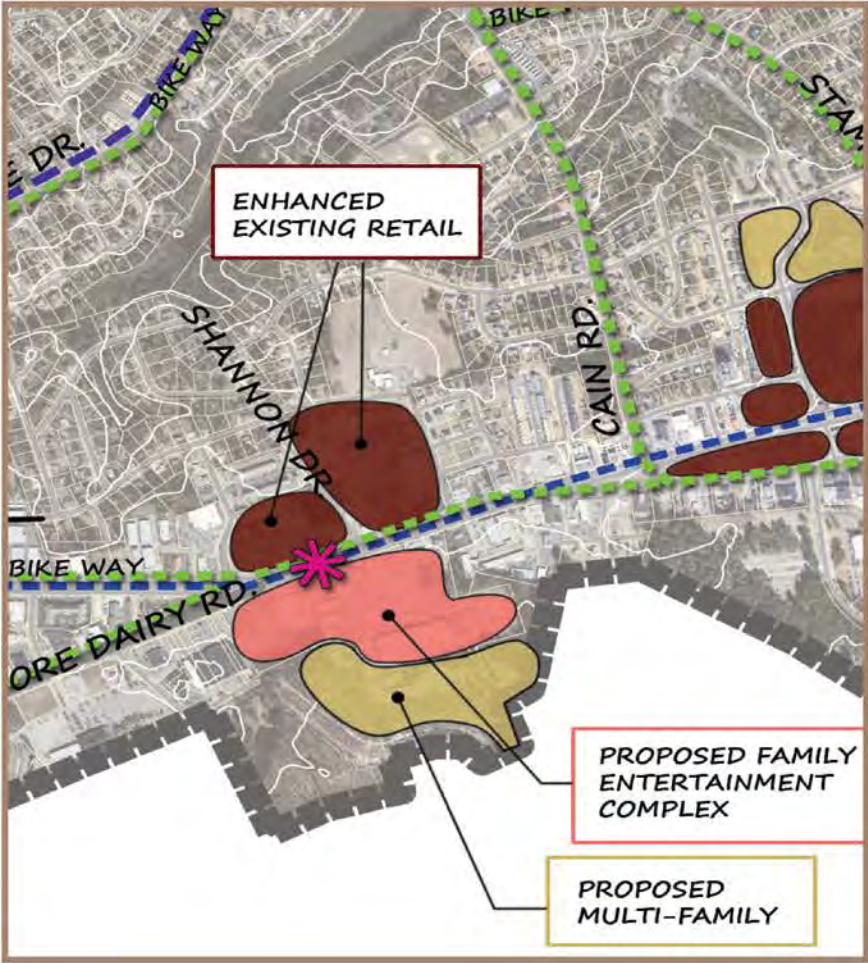
The **Sycamore Dairy Road** intersection is located in the core of commercial development along the Bragg Boulevard corridor, anchored by big-box retail uses including shopping centers, a grocery store, movie theater, flea market, and a hotel. This area is currently served by numerous retail tenants in spaces ranging from 40,000 square feet down to 1,000 square feet, with a combination of local owners and national retailers.

Moving forward, it is expected that this area will continue to serve as a critical commercial hub along the corridor, particularly along the northeastern side of Bragg Boulevard where the Food Lion is currently located. Future expectations for the southern and western parcels across Bragg Boulevard could include a new family entertainment complex (water park, bowling alley, batting cages, go carts, etc) with multi-family housing along the rear to help add residential density along the corridor.

### Retail Center Characteristics

- > Land uses include retail, office, family entertainment and lodging; supporting medium-density residential uses off Bragg Boulevard
- > Includes primarily single-use structures, but mix of single- and multi-tenant occupancy
- > Sidewalks and bike lanes on both sides of the street
- > Planted median optional

### Example Retail Center





# VILLAGIO | NEIGHBORHOOD VILLAGE CENTER

## Concept Plan

The Villagio Center would build on the exciting revitalization already occurring in this area due to the recent construction of the Villagio, which contains upscale multi-family rental units. The current property owner has plans for additional multi-family units to double and perhaps triple the current size of the Villagio, while also creating office buildings along the frontage of Bragg Boulevard.

This type of development in the area could continue in the future, mixed with some retail components. Major infrastructure improvements set to occur throughout the area will also link community streets and create a grid of developable land, with the main improvement being the Blanton Road extension between Pamalee Drive and Bragg Boulevard. The development concept would then extend across the southwestern side of Bragg Boulevard where there are large tracts of single-owner land with more proposed retail and mixed-use or multi-family units occurring closer to Sycamore Dairy Road.

### Other Elements

- > Proposed bike routes/paths along planned Blanton Road extension and Sycamore Dairy Road

### Neighborhood Village Center Characteristics

- > Land uses include medium- to high-density residential, retail, office, lodging, and parks/open space
- > Includes mixed-use structures (initially focused within the Villagio development, with longer-term potential on the west side of Bragg Boulevard, along the proposed extension of Blanton Road)
- > Sidewalks and bike lanes on both sides of the street
- > Planted median optional

### Example Neighborhood Village Center



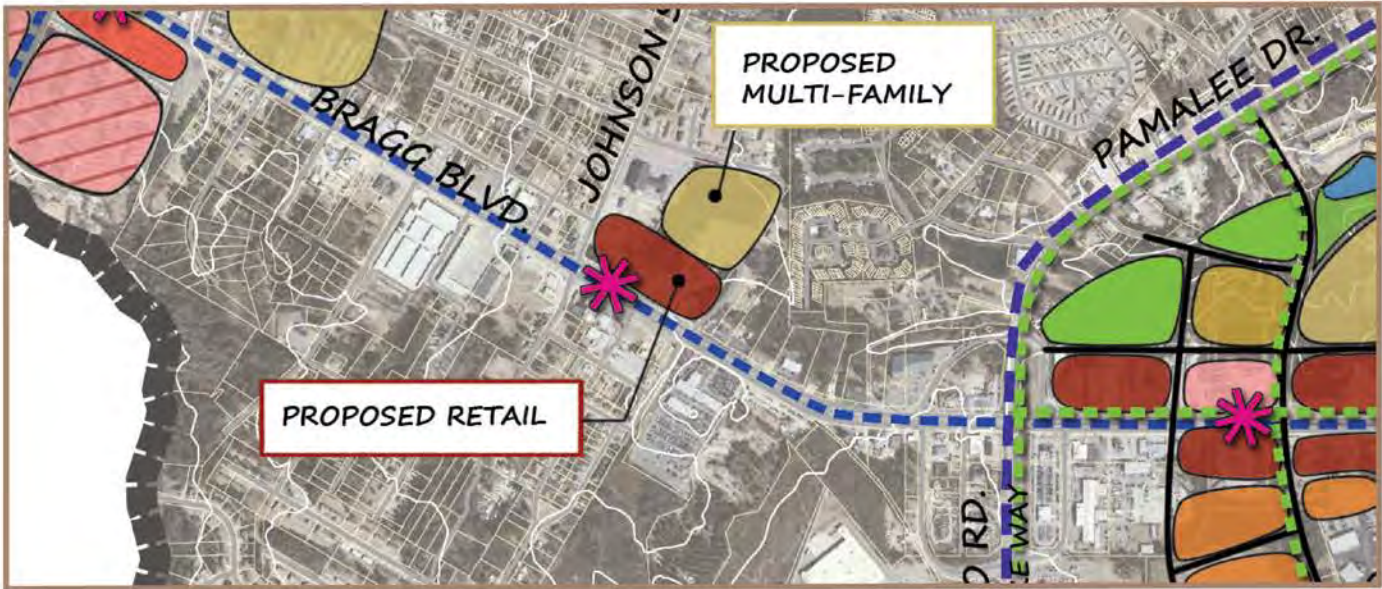


# BONNIE DOONE | RETAIL CENTER

## Concept Plan

The **Bonnie Doone Retail Center** will provide critical connections for the Bonnie Doone community by offering express access to many shopping and cultural opportunities within the corridor – both existing and future. Situated near the Johnson Street intersection, the Bonnie Doone Activity Center will continue to build off retail improvements that have been informally discussed along the eastern side of Bragg Boulevard – with local interest in filling such community needs such as a pharmacy, bank, and restaurant.

Directly behind the proposed retail site is land owned by a large community church. Based on feedback during the public meeting portion of the charette, the church is going to build a new congregation hall further east on Johnson Street and turn the existing structure into a full-time family life/church recreation center, which would have a positive impact on the area. One idea that was discussed to help finance this endeavor is for the church to sell some of the land in the rear of its property for multi-family development. This additional density would assist the retail tenants by providing more potential customers.



### Retail Center Characteristics

- > Land uses include retail, office, family entertainment, and lodging; supporting medium-density residential uses off Bragg Boulevard
- > Includes primarily single-use structures, but mix of single and multi-tenant occupancy
- > Sidewalks and bike lanes on both sides of the street
- > Planted median

### Bonnie Doone Today



### Example Retail Center





# SANTA FE DRIVE/SHAW ROAD | EMPLOYMENT CENTER

## Concept Plan

The Santa Fe Drive/Shaw Road Employment Center is very important to the future of the corridor because it serves as the last activity center before entering Fort Bragg (or the first center leaving the base). This area has great potential for job creation along the corridor. With the Military Business Park providing large lot leases and ownership opportunities to the north and west of this intersection, the potential exists for this corner to be filled with several speculative office buildings. These buildings will allow small companies and smaller tenants to occupy space near their larger counterparts within the Military Business Park and Fort Bragg.

The City of Fayetteville owns a 400+ acre tract of land dedicated for passive park use north of Shaw Road to the west of Bragg Boulevard. Unlike some of the other areas along Little Cross Creek, the Public Works Commission indicated that this area is available for the general public to access and recreate. There is also a potential to connect this future park to the Cross Creek greenway network west of the study area. The immediate corners at this activity center (in front of the office buildings) may allow for more direct corner retail uses such as a convenience store, an extended stay hotel, a fast food restaurant, or a pharmacy.

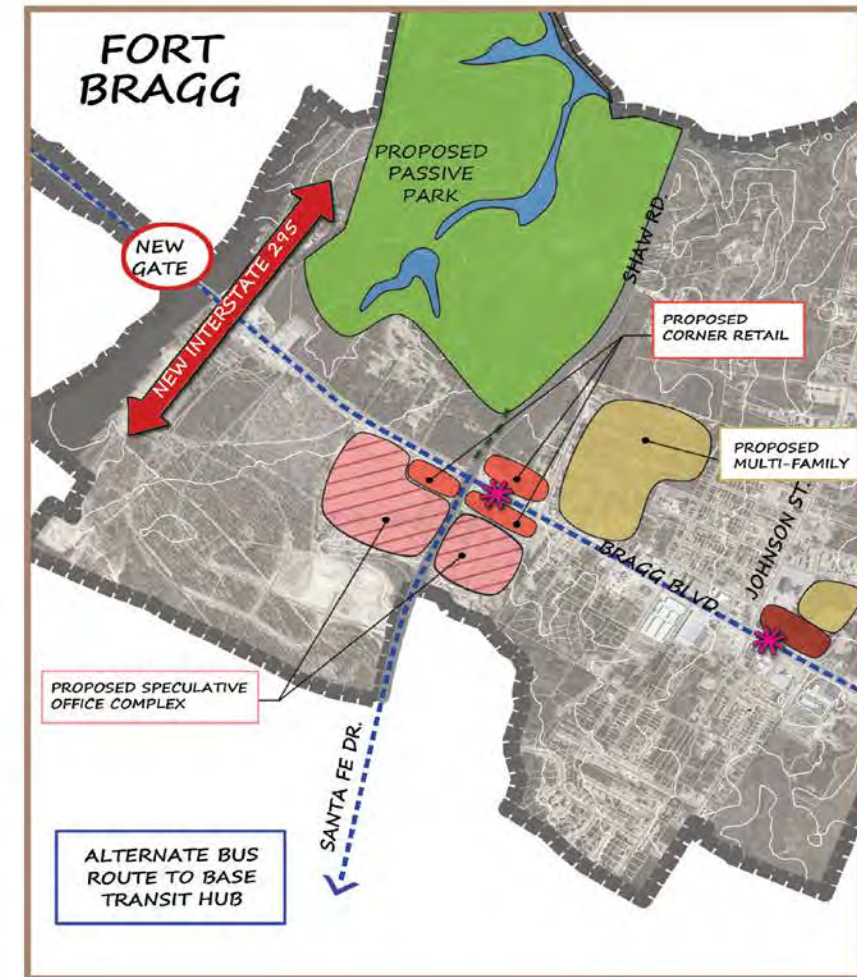
### Other Elements

- > Proposed passive park on City of Fayetteville property along Shaw Road

### Employment Center Characteristics

- > Land uses include a mix of retail, office, and light industrial
- > Includes single-use structures, but mix of single- and multi-tenant occupancy
- > Sidewalks on both sides of the street
- > Planted median

### Example Employment Center



In addition to the eight activity centers, transit hubs are proposed at each end of the corridor. These transit hubs are described below.

- **Downtown Fayetteville Multimodal Center** – This hub will serve as the terminus for all bus routes and multimodal opportunities within the entire City of Fayetteville as it will be located south of the Special Operations Museum and just along the western edge of downtown. Prior to this center being completed, there are several downtown locations that would properly serve as the terminus for any bus service or transportation option linking Bragg Boulevard.
- **Fort Bragg Transit Hubs** – While these locations would be determined, there are three areas that have been identified as part of the plan process as potential transit hub locations. Approaching from downtown, the first (and possibly a seasonal stop) could be in close proximity to Stryker Golf Course and the Fairgrounds. The second stop could be located centrally to the new buildings east of Bragg Boulevard, around the intersection with Goldberg Street or further north at Honeycutt Street. A third possible hub could be near the entrance for the Butner Gate as this is close to the PX/Commissary.



**Access Management Concepts**

The Fayetteville Area Metropolitan Planning Organization (FAMPO) is the designated agency to develop the Long Range Transportation Plan (LRTP) for the Fayetteville region. The FAMPO region includes the City of Fayetteville; the Towns of Eastover, Hope Mills and Spring Lake; Fort Bragg Military Reservation and Pope Air Force Base, and portions of Cumberland, Hoke and Harnett Counties. The policy adopted as part of the FAMPO’s LRTP states that “Access to the area’s major roadways shall be managed so as to preserve the intended purpose of the highway and to protect the investment of taxpayer dollars used to build the facility.” Bragg Boulevard is a state route and designated as a strategic highway corridor in the region. As noted in the Strategic Highway Concept summary, it is recommended that Fayetteville pursue redesignation of Bragg Boulevard from “expressway”, which would involve more limited access, to “Boulevard” under the strategic highway system to better reflect the vision for the corridor.

Elements such as medians, median openings, auxiliary lanes, driveway design, intersection channelization, frontage roads, and grade separations are used to help manage access. Design standards for these elements are usually set forth in local subdivision and site plan regulations or refer to the NCDOT standards. Design standards are especially important for situations in which there is no comprehensive access management plan.

Access management involves planning, coordination, and approval of the location, number, spacing and design of access points from a roadway to adjacent land use. The main purpose of access management along major arterials is to efficiently control vehicular movements in and out of developments such that arterial traffic conflict points<sup>4</sup> are reduced, and roadway capacity and safety are maximized. For example, each full median opening or an unsignalized intersection along a four-lane roadway has 36 potential conflict points. The same intersection can be improved by reducing conflict points with a traffic signal. The use of directional median openings also reduces the number of conflict points at an intersection. The use of right in/right outs along the corridor further reduces the number of conflict points at an intersection.

<sup>4</sup> Conflict point is defined as a location where there is a potential for two vehicle paths to cross, creating a potential accident location

For this concept, which includes multimodal improvements, access management recommendations involve incorporating alternate modes of transportation including public transit, bicycles and pedestrians, as well as encouraging land use techniques such as those described for the activity centers which provide nodal development and mixed-use development that reduce the need to travel by automobile.

Access management for the Activity Center and Multimodal Concept addresses vehicle safety and efficiency, and also promotes transit ridership and corridor revitalization. There are several access management strategies that could be considered for application in the Bragg Boulevard corridor under this concept, including raised or landscaped medians, left-over median openings, consolidated/shared driveways, and various intersection treatments.

Raised or Landscaped Medians

Raised or non-traversable medians are generally recommended for roadway segments where daily traffic volume exceeds 24,000 vehicles per day, and within the functional area of a traffic signal (approximately 1,200 feet).

The downtown segments of the Bragg Boulevard corridor already have raised medians at several locations. North of Segment B, Bragg Boulevard has landscaped medians. Raised concrete medians without any landscaping could be implemented within available right-of-way to improve safety at intersections with Ames Street and Westmont Drive.

Left-Over Median Openings

The left-over median opening, also referred to as the directional crossover design, is an access management design concept where the median is channelized to allow vehicles traveling on a major street to enter the median opening in order to make left-turns in to a minor street or driveway. The design only accommodates left-turns from the major street. No left turns from the minor street or driveway are allowed on to the major street, improving safety. In contrast, a full movement median opening allows left turns going from the major street to the minor street or driveway as well as left turns from the minor street to the major street. For any new median openings along Bragg Boulevard left-over median openings should first be considered. Full movement median openings are recommended only at locations where there may be a need for future traffic signals and the spacing is at least half-mile from a signalized intersection.

Based on the safety issues at the Barrington Cross Street, which currently operates as a full movement median opening, it is recommended that this location be analyzed to check if it meets the signal warrants. If a new signal is warranted, this intersection could also be signed as an access point to the Fayetteville Technical Community College from the south.

Consolidated/Shared Driveways

Best access management practice includes the following spacing criteria for driveways and intersections:

- Driveway spacing: 0.25 mile
- Signalized intersections spacing: 0.5 mile recommended, 0.25 mile desirable minimum, 0.125 mile permitted in downtown conditions



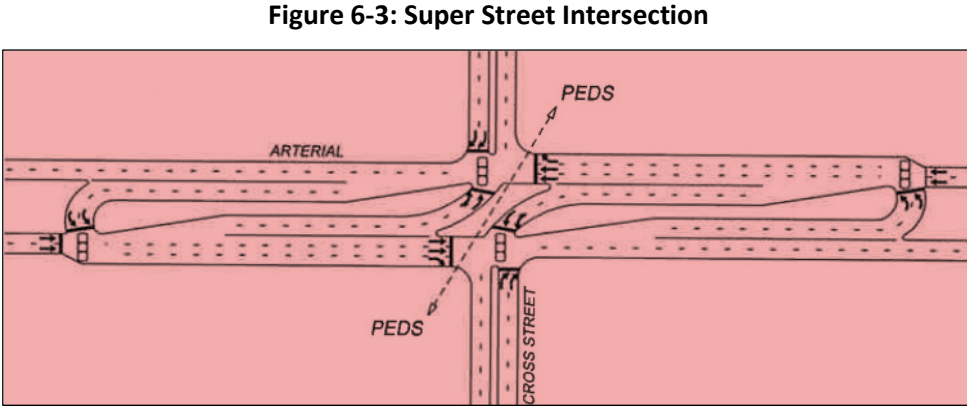
The requirement of shared driveways is becoming more common and is an effective technique in limiting the number of access points onto major roadways. Shared driveways have the potential to reduce crashes associated with turning traffic and improve the efficiency of the arterial road. Consolidation and use of shared driveways should be considered at locations along Bragg Boulevard that are targeted for site development or redevelopment.

### Intersection Treatments

A variety of intersection treatments could be utilized to enhance safety such as a superstreet intersection, quadrant left roadway, and added turn lanes depending on the unique characteristics of each area and specific intersection.

#### *Super Street Intersection*

A superstreet intersection is a type of intersection that prohibits cross-street traffic on the minor street approach from making left turn or through movements on to or across a major street in order to improve safety and traffic flow (see Figure 6-3). Drivers on side streets wanting to turn left or go straight must turn right onto the major street, and then make a U-turn through a specially designed median break a short distance away from the intersection. After making the U-turn, drivers can either continue straight or make a right turn at the original intersection, the equivalents of making a left turn or through movement from the side street. The major movements through the intersection are coordinated using traffic lights as illustrated in Figure 6-3. Studies have shown that the superstreet intersection reduces the likelihood of crashes, especially head-on and right-angle crashes, by significantly reducing the number of conflict points at an intersection. The superstreet intersection also simplifies the signal timing at the intersection to two-phase operation and provides more green time to the major street traffic. Because superstreet intersections have 40 percent fewer conflict points than conventional intersections, the design has been shown to substantially enhance safety for pedestrians and bicyclists as well. As illustrated in Figure 6-3, the major street crossing for pedestrians and bicyclists is generally on a diagonal path, which is longer than at a conventional intersection. However, the median island provides buffer space and pedestrians and bicyclists must only cross traffic coming from one direction during a crossing signal phase with sufficient space provided in the median for pedestrians and bicyclists to wait to cross traffic coming from the other direction. Superstreet intersections have been implemented at several locations in North Carolina, including along US 23/74 in Haywood County, US 1 in Lee and Moore Counties, and US 17 in Brunswick County.



Source: *Unconventional Arterial Intersection Design, Management, and Operation Strategies* (2003)

Due to the wide median on Bragg Boulevard, the layout for existing intersections provides a wider footprint to accommodate the superstreet intersection strategy. In addition, the existing traffic volumes and patterns (i.e., low cross-street left and through movements) could make the superstreet strategy a compatible option at several locations. Several intersection locations were identified where the highest turn movements are the southbound/northbound left-turns and the westbound/eastbound right-turns. Both of these types of intersection turn movements operate efficiently with a superstreet concept. The superstreet intersection design could be considered as part of safety mitigation improvements under the Activity Center and Multimodal Concept at the following locations:

- Sycamore Dairy Road/Carol Street
- Shannon Drive

- William Clark Road

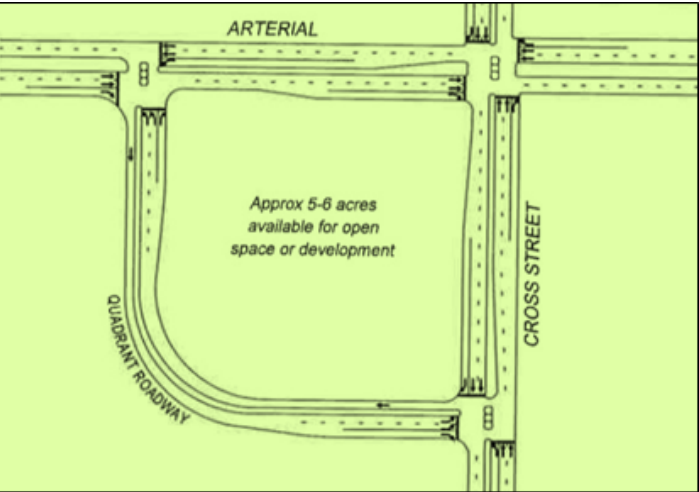
*Quadrant Left Roadway*

A quadrant left roadway option could be considered as part of approving new redevelopment plans near busy intersections with high left-turn traffic volumes. Under the quadrant left roadway intersection, high left-turning traffic from a cross street will first go through the main intersection and make a right turn onto a nearby quadrant roadway and then turn right on to the main arterial (see Figure 6-4) replicating the original left turn movement. The lower volume left-turning traffic from the cross street will be required to turn left at the quadrant roadway before the main intersection then left onto the main arterial instead of making left at the main intersection (see Figure 6-5). At a quadrant left roadway intersection, some pedestrians may have to cross an extra street to make a desired movement compared to a conventional intersection. However, crosswalk lengths crossing the main arterial are typically reduced due to the removal of left-turn lanes. In addition, shorter cycle lengths provide pedestrians more frequent opportunities to cross the main arterial and some pedestrians may experience shorter walking distances by using the new connecting quadrant roadway. Bicyclists typically experience longer green times and favorable progression at quadrant left roadway intersections as well.

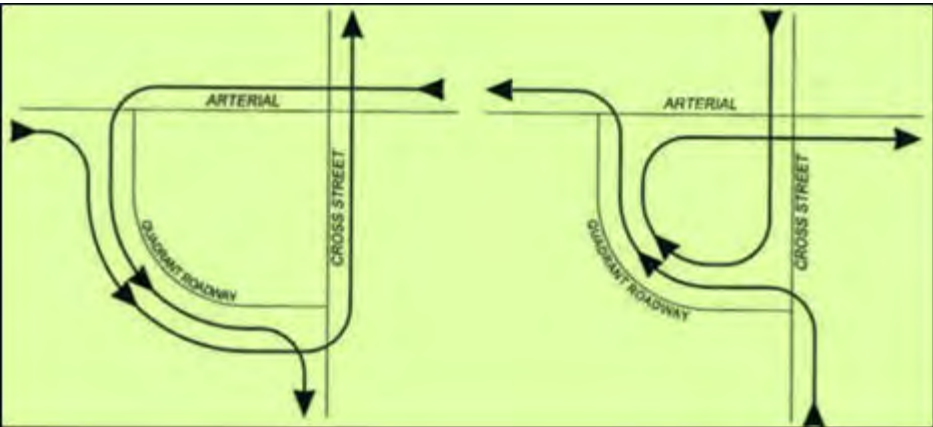
NCDOT recently implemented a quadrant left intersection design on Sam Furr Road (NC 73) east of I-77 in Huntersville. Vehicles heading east or west on Sam Furr Road will no longer be allowed to make left turns onto US 21. To access US 21 north or south of the intersection, vehicles will have to use Holly Point Drive.

Given the high left-turning traffic from Santa Fe Drive to Bragg Boulevard and the highest number of crashes, the Santa Fe Drive intersection should be targeted for safety mitigation improvements including consideration of left-turn substitution using a new quadrant roadway in the southeast quadrant. The intersection with Fort Bragg Road/Cain Road should also be targeted for safety mitigation improvements, with the potential to use Sigman Street as a quadrant left roadway.

**Figure 6-4: Quadrant Left Roadway – Main Intersection**



**Figure 6-5: Quadrant Left Roadway – Secondary Intersection**



Source: *Unconventional Arterial Intersection Design, Management, and Operation Strategies* (2003)

Intersection Turn Lanes

In general, left-turn lanes are recommended at all median openings and signalized intersections where left-turns are permitted. Given the safety issues at Stamper Road and high right-turn traffic volumes, an exclusive northbound right-turn lane could be implemented to improve traffic operations and safety. All turn lane recommendations would need to conform to adjacent land use so that business operations/access at these intersections is not negatively impacted by any additional right of way that would be required. In addition, the efficiency of proposed pedestrian and bicycle transportation for areas where additional turn lanes are proposed should be maintained by evaluating options such as mid-block signalized crossings or pedestrian overpasses.

**Transit Concept**

A combination of enhanced and potentially evolving into premium transit service is included in the Activity Center and Multimodal concept. Enhanced transit would only require additional buses and designated bus stops along the corridor. Buses would operate in mixed traffic. Premium transit can mean high-end fixed route bus service, bus rapid transit (BRT), streetcar, light rail or commuter rail services. Future premium transit services along Bragg Boulevard are recommended to have the following attributes:

- Limited number of stops to maintain short travel time
- Good/Comfortable/Clean Seats
- Branded bus wraps for visibility
- Startup frequency of 30 minutes or less
- Branded bus stops (with walk-access, safety and public art features)
- Variable Message Signs for next bus arrival information

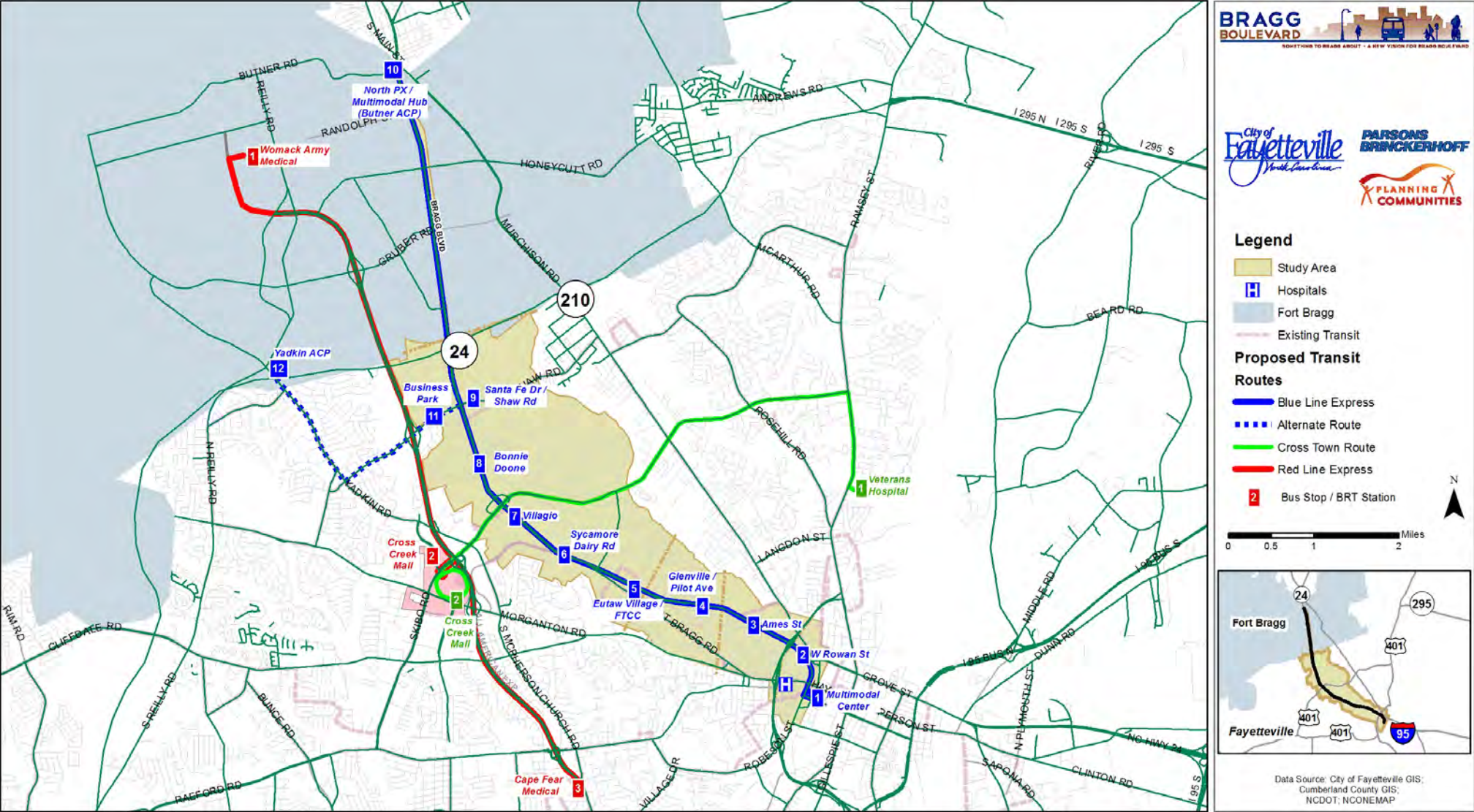
The following three transit routes should be considered for implementation:

1. Cross-Town Bus Route between Cross Creek Mall and VA Hospital via Pamalee Dr. and Ramsey St.
2. Blue Line Express Bus between Fort Bragg and Downtown Fayetteville via Bragg Boulevard
3. Red Line Express Bus between Fort Bragg and Cape Fear Medical Center via Cross Creek Mall

These routes are depicted in Figure 6-6 on the following page.



Figure 6-6: Proposed Bus Routes



The Cross-Town Express is anticipated to have regular bus stops at the following locations:

- 1. Cross Creek Mall
- 2. Santa Fe Dr./Bragg Boulevard
- 3. Pamalee Dr./Cain Rd.
- 4. Pamalee Dr./Country Club Dr./Murchison Rd.
- 5. Country Club Dr./Rosehill Rd.
- 6. VA Medical Center

The Blue Line Express would start with regular bus stops and would evolve into high-end bus stops at the following locations:

- 1. Fort Bragg Multimodal Center (North PX/Butner ACP) <sup>5</sup>
- 2. Santa Fe Dr./All American Expressway (alternate future route)
- 3. Santa Fe Dr./Bragg Boulevard
- 4. Bragg Boulevard/Johnston St./Mike St. (Bonnie Doone)
- 5. The Villagio
- 6. Bragg Boulevard/Sycamore Dairy Rd.
- 7. Eutaw Village/Fayetteville Technical Community College
- 8. Bragg Boulevard/Glenville Ave./Pilot Ave.
- 9. Bragg Boulevard/Ames St.
- 10. Bragg Boulevard/Rowan St.
- 11. Downtown Fayetteville

The Red Line Express is anticipated to have regular bus stops at the following locations:

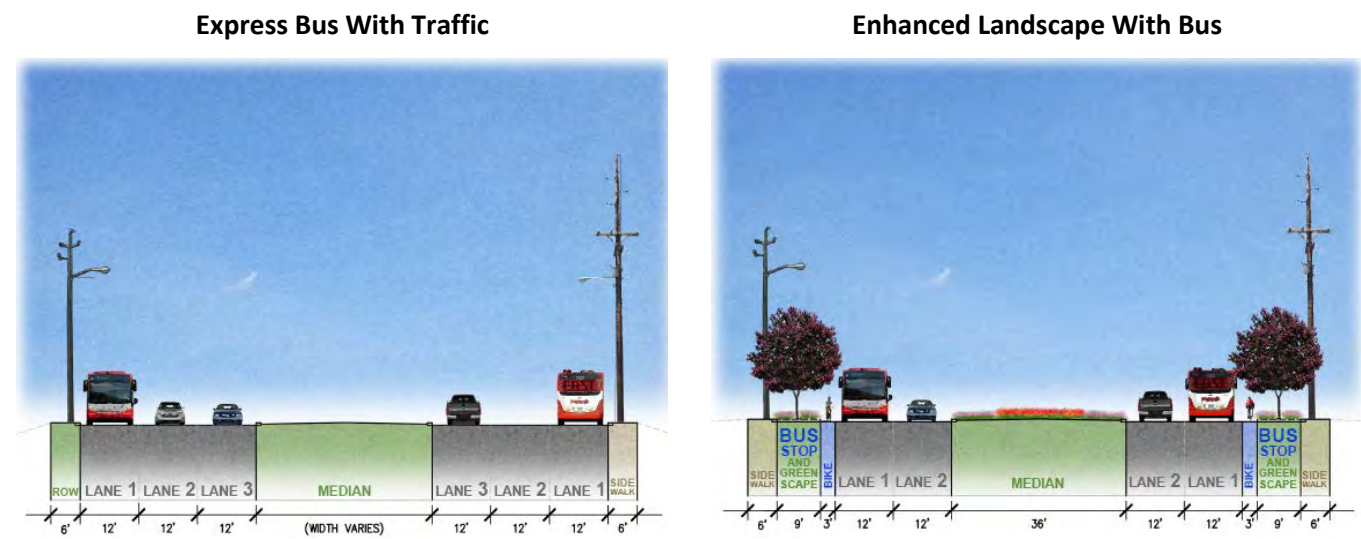
- 1. Fort Bragg Womack Army Medical Center
- 2. Cross Creek Mall
- 3. Cape Fear Medical Center

<sup>5</sup> Fort Bragg connection point is subject to change in the future when Fort Bragg Blvd will be closed to through traffic. The route alignment could change to connect at the Yadkin ACP or other ACP as determined by the Post.

The goal of providing premium transit services along Bragg Boulevard is to attract choice riders in the City and transform the Bragg Boulevard corridor into a multimodal transportation corridor between downtown Fayetteville and Fort Bragg. Other goals include supporting future development, providing community connections, and attracting future transit-oriented development for corridor revitalization.

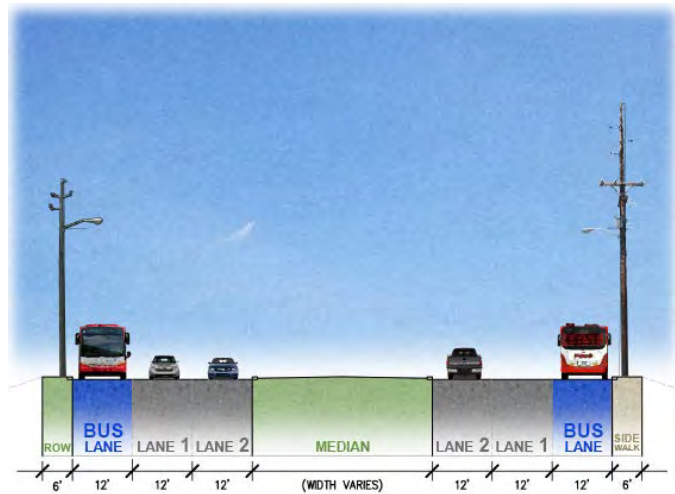
The following figures provide visual depictions of the roadway cross-sections that might correspond to each level of transit proposed along Bragg Boulevard in the short- and long-term. Bus transit in mixed-traffic could be implementable in the short term, while dedicated bus lane transit would be further out and Bus Rapid Transit would be a long-term strategy dependent on timing and implementation of the strategies in this plan (Figure 6-7).

Figure 6-7: Roadway Concepts for Potential Transit Levels

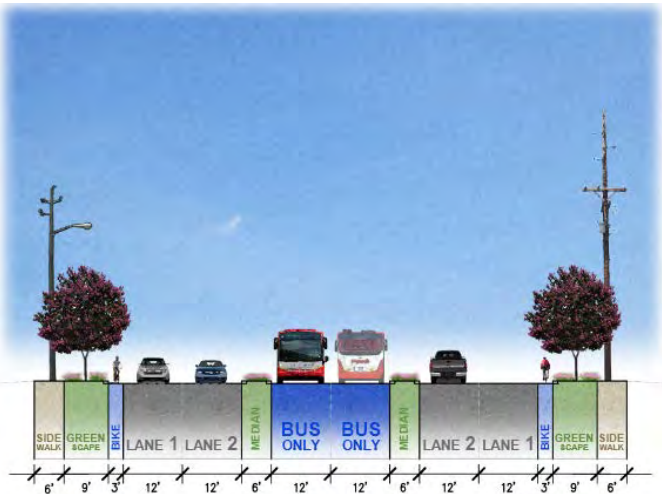




**Dedicated Bus Lane**



**Enhanced Landscape With BRT**



**Concept Feasibility**

In most cases, the multimodal/activity center concept is not proposing different types of land uses than already exist along the corridor. The intensity and design of land uses are what is being proposed to change in an effort to support enhanced transit along the corridor. Transit service itself would be feasible from the onset of implementation, within the first couple years of plan adoption, while premium transit would take longer to develop and would depend on other implementation actions. The enhanced transit service, in addition to the continued development of the Villagio, Military Business Park, the City’s RFP for the former Days Inn site, and the Fayetteville State Master Plan, should help to generate renewed development interest along Bragg Boulevard.

The current strip development land use pattern along Bragg Boulevard will make it challenging to shift to more of a nodal concept without disrupting the operations of existing businesses. Efforts would be needed to work with property owners and developers through the process. Reducing the current level of access to Bragg Boulevard and consolidating driveways would help to reduce traffic accidents and increase mobility. In most cases, no additional right-of-way will be required, which should help to minimize impacts to existing properties. Further volume and capacity studies would need to be conducted prior to a decision to reduce the roadway cross-section in order to provide a dedicated median bus lane.

A future land use plan, summary of recommendations, phasing strategy, identification of financial incentives, and cost estimates for proposed public infrastructure improvements are located in Chapter 7, as well as additional detail on the feasibility of various aspects of the overall concept.

## 7.0 RECOMMENDATIONS

As described in Chapter 6, the recommended concept for the Bragg Boulevard corridor is the **Activity Center and Multimodal Concept**. A primary objective of the Bragg Boulevard Corridor Plan is to determine the feasibility of enhanced transit service along Bragg Boulevard and identify how land uses along the corridor could support that service. It has been determined that enhanced transit service along the corridor is feasible to implement in a phased capacity, with more limited service initially that would progress to more robust transit service as land development and projected ridership allows. The land use and development concepts presented for the Activity Center and Multimodal alternative for Bragg Boulevard would complement and support this enhanced transit service.

The recommended Activity Center and Multimodal concept for Bragg Boulevard requires a strategic action plan that identifies the policies/guidance documents needed, the timing of proposed recommendations, and the roles of responsible parties and participating stakeholders. A wide range of actions phased over multiple years is needed to realize the recommended concept. These actions are summarized in this Chapter for key plan and policy areas. A detailed implementation plan with phasing recommendations, financial strategies, and estimated costs or unit cost information for various public infrastructure items is presented.

### Implementation Strategies

Specific implementation strategies have been summarized for key plan and policy areas such as land use, access management, transit and transportation, other infrastructure, and economic incentives and policies.

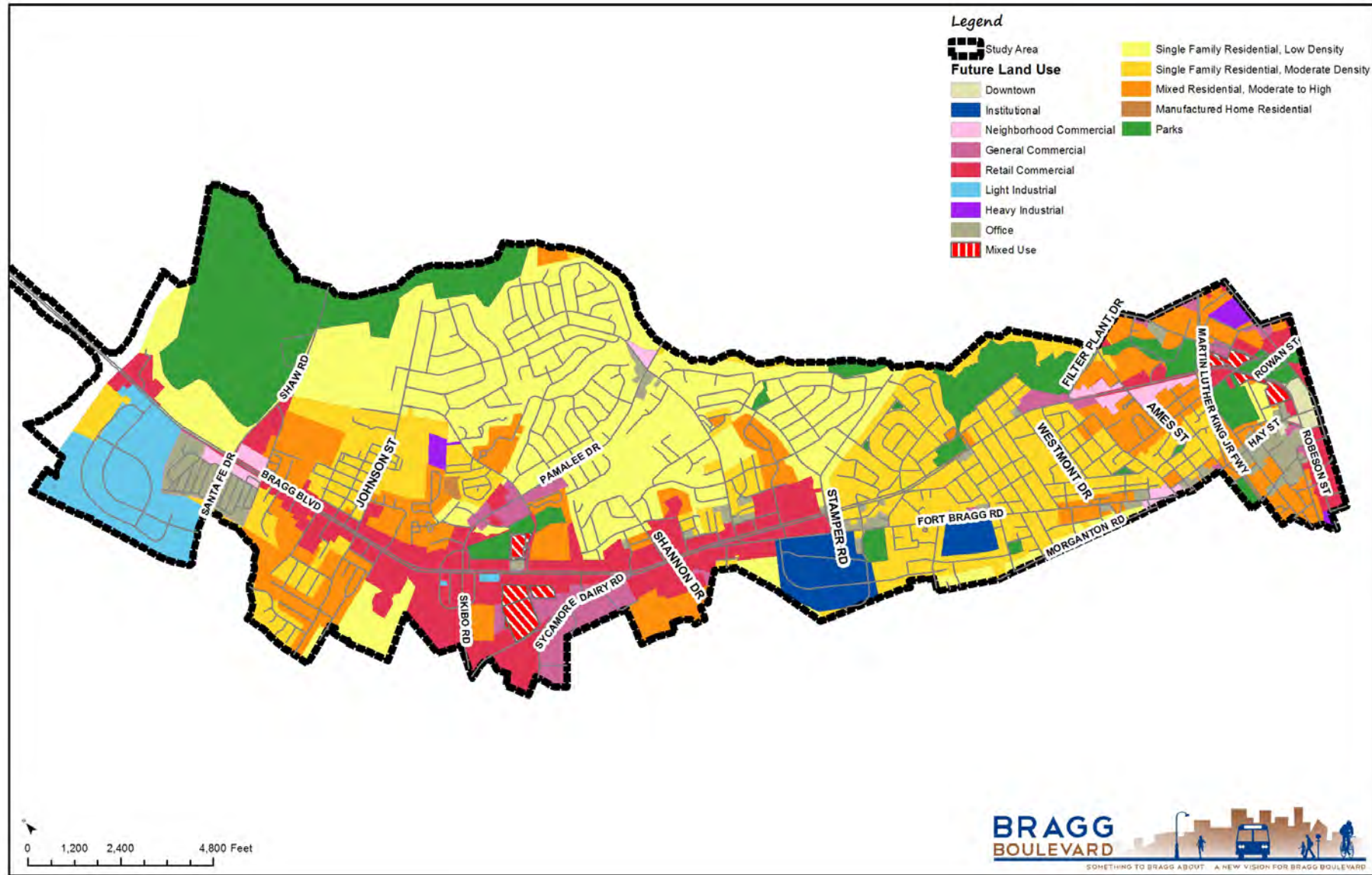
### Land Use Recommendations

To support an enhanced bus transit system, land uses along the Bragg Boulevard corridor will need to be intensified. Dispersed single-tenant and single-use structures are not transit-supportive and promote increased vehicular use. For this reason, the series of activity centers described in the preceding chapter have been proposed in strategic locations along the corridor. The nature and character of these activity centers varies based on land, taking into consideration existing land uses, public infrastructure, and previously adopted small area/corridor plans in the area.

The first step in developing the activity centers as envisioned is to define a future land use plan for the corridor. Based on the recommended concept that will move forward, an adopted land use policy would provide a blueprint for future growth along the corridor. This document, and associated map, would need to be consistent with the underlying zoning categories/regulations in order for elected officials to make informed decisions regarding future development proposals.

Figure 7-1 indicates proposed future land use for the Bragg Boulevard corridor. Allowable uses and associated densities within the land use designations would be detailed in the supporting zoning descriptions within the Unified Development Ordinance. It may be necessary to develop a transit overlay district within the identified activity centers that provides additional transit-oriented site design, development mix/intensity and building configuration requirements.

Figure 7-1: Overall Corridor Future Land Use





A variety of land uses have been proposed to reflect recommendations within key activity centers along the corridor. This map shows land uses based on existing zoning as well as land uses associated with the recommendations made in this Corridor Study.

Land use is primarily single-family residential east and west of Bragg Boulevard. Along the corridor, commercial land uses are located in the vicinity of US 401/Martin Luther King Jr. Freeway and between Stamper Road and Johnson Street. A number of areas within activity centers have been designated for mixed-use development, with uses including single-family and multi-family residential, neighborhood retail, larger-scale retail, office, and other uses. Additionally, light industrial and flex office uses are planned in the vicinity of the Military Business Park. In this area, land use classifications were changed to reflect current development, which does not align with underlying zoning.

The Future Land Use Map is largely consistent with existing zoning in the study area, with a limited number of exceptions. Table 7-1 describes these exceptions, while Figure 7-2 visually indicates where these differences are located along the Bragg Boulevard corridor.

**Table 7-1: Variations in Current Zoning and Future Land Use**

Activity Center	Number of Parcels	Current Zoning	Recommended Future Land Use
Rowan Street	25	Community Commercial	Mixed Use
Villagio	1	Community Commercial	Office
Villagio	2	Community Commercial	Mixed Residential
Eutaw Village	1	Limited Commercial	Mixed Residential
Eutaw Village	2	SF-10 (Single-Family)	Mixed Residential
Shaw Road/Santa Fe Drive	2	SF-6 (Single-Family)	Office
Sycamore Dairy Road	4	SF-6 (Single-Family)	Mixed Residential

*\*Mixed use areas are envisioned to include a combination of residential, retail, office, and other uses; mixed residential areas are envisioned to include a combination of single- and multi-family housing.*

Additionally, parks have been recommended in some areas currently zoned for other uses. These include the proposed greenway along Cross Creek within the Ames Street and Villagio activity centers; the proposed pocket park at Glenville Avenue and Bragg Boulevard; and the passive park near the Fort Bragg boundary. However, parks are not reflected in the City of Fayetteville Zoning Ordinance so these recommendations will not result in the need to change current zoning.

Figure 7-2: Future Land Use-Zoning Conflict



### Transit

Currently transit service along Bragg Boulevard is limited to small segments of existing FAST bus routes. The goal of providing enhanced transit services along Bragg Boulevard as described in Chapter 6 is to more efficiently serve transit-dependent population as well as to attract choice riders in the City. The vision is that the combination of improving transit services and attempting to shift the nature of development along Bragg Boulevard would transform the corridor into a multimodal transportation route between downtown Fayetteville and Fort Bragg. Ridership models indicate that the demand is there to initially provide enhanced transit service that could eventually evolve into a premium transit service.

As described in greater detail in Chapter 6, the following three transit route concepts were developed:

1. Cross-Town Bus Route between Cross Creek Mall and VA Hospital via Pamalee Drive and Ramsey Street
2. Blue Line Express Bus between Fort Bragg and Downtown Fayetteville via Bragg Boulevard
3. Red Line Express Bus between Fort Bragg and Cape Fear Medical Center via All American Expressway

The general public would be able to utilize the proposed Red Line Express Bus, which could be operated and maintained by either FAST or Fort Bragg. The Cross-Town Bus Route, which would connect Cross Creek Mall with the Department of Veteran Affairs Medical Center along Ramsey Street, could initially build off of either the Fort-Bragg operated Red Line or the Blue Line. There may be some potential to coordinate the Blue and Red Lines with existing FAST bus routes and realize some cost savings through route coordination, common stops, or vehicle sharing. Route 6 provides service along Bragg Boulevard from Skibo Road to Shaw Road with stops at Old Shaw Road and Shaw Road. Route 14 provides service from Cain Road to Sycamore Dairy Road, with stops at Eutaw Village and Sycamore Dairy Road.

To initiate service along these routes, coordination between FAST and Fort Bragg is needed to refine the routes, establish the schedule for initiation of each service, and identify budget for capital equipment and operations for each route. Service and stops along the Blue Line Route serving Bragg Boulevard could grow as development occurs, with only currently high-activity stops along Bragg Boulevard being utilized initially, such as Santa Fe Drive, Sycamore Dairy Road, Eutaw Village/FTCC, and Ames Street. New buses would need to be purchased for the initial hourly frequency with only basic passenger amenities on buses and at bus stops. Buses and bus stop amenities on the Blue Line Express would have a unique name and branding. Due to the relatively limited amount of funding needed for this express route service, which is estimated at a capital cost of \$150,000, service could be initiated through a combination of City budget allocated to the service and a joint cost-sharing agreement with Fort Bragg. FAST should also consider general system wide improvements and assess the frequency of the other bus routes to synchronize and coordinate with the new routes.

As transit-supportive development continues and creates the demand for more frequent express bus services along the Blue or Red lines, improvements such as bus stop shelters, increased frequencies, next bus information, traffic signal pre-emption for buses, and additional buses would be needed. These improvements would likely require additional funding sources. Sources could include Federal Transit Administration’s (FTA) Small Starts or Very Small Starts programs, which are the federal government’s primary financial resource for locally planned, implemented, and operated non-guideway bus-based projects that include a defined set of low-cost features. Other funding sources could include new tax revenue from upgraded development along the corridor and an increase in the City and/or County’s tax rates, including sales tax, hotel/motel occupancy tax, gas tax, and/or property tax.



As the recommended transit lines continue to develop into a premium service with the possibility of a dedicated lane for buses, further improvements may become eligible over the long-term for additional federal funding through the FTA’s New Starts program. This program provides local governments funding for fixed-guideway projects such as rapid rail, light rail, commuter rail, automated guideway transit, people movers, and exclusive facilities for buses (such as bus rapid transit).

**Roadway, Pedestrian and Bicycle Networks**

In addition to recommendations for enhanced transit service, strategies related to pedestrian, bicycle, and general roadway infrastructure characteristics are needed to achieve a multimodal vision for the corridor. The following range of cross-sections is proposed for consideration along the corridor:

**Table 7-2: Proposed Cross-Section Options**

Location	Cross-Section Options
Hay Street to Martin Luther King Jr. Freeway	Median divided Four or six lanes Sidewalks and bike lanes Greenway connection to Murchison Road
Martin Luther King Jr. Freeway to Westmont Drive	Undivided/center turn lane Six lanes Sidewalks
Westmont Drive to Stamper Road	Median divided Six lanes Sidewalks Bike lanes along Stamper Road connecting to Fort Bragg Road and Cain Road
Stamper Road to Sycamore Dairy Road	Median divided Six lanes Sidewalks
Sycamore Dairy Road to Swain Street (south)	Median divided Four or six lanes Sidewalks Bike lanes located along Fort Bragg Road until Bragg Boulevard, extending to Blanton Road Bike lanes along Cain Road and Blanton Street connecting to existing Pamalee Drive bike lane
Swain Street (south) to I-295	Median divided Six lanes Sidewalks

The potential future cross-sections along Bragg Boulevard include a combination of existing and new multimodal infrastructure elements. Segments that have proposed cross-section options (four or six lanes) include Hay Street to Martin Luther King Jr. Freeway and Sycamore Dairy Road to Swain Street (south). It is recommended that a follow-up feasibility study be conducted to determine the potential for these cross-section changes. All other segments may have additional median cuts and/or median construction, but all are planned to remain six lanes (not including turn lanes).

All cross-sections include recommendations for sidewalks on both sides of Bragg Boulevard. Under current City policies, once sidewalks are installed on one side of a street, that street does not qualify for additional sidewalk construction until other areas receive sidewalks on one side of the street. This policy should be revised in order to fund sidewalks on both sides of the street, particularly in designated activity centers. Additionally, a funding source to support construction of sidewalks on both sides of the street should be identified or developed, with potential sources including infrastructure bonds, Community Development Block Grant (CBDG) funds, Tax Increment Financing (TIF) or Municipal Services Districts, and programmed funds as part of the City’s Capital Improvement Program. Sidewalk sections to complete are shown in Table 7-3. Bike lanes proposed for consideration along Bragg Boulevard or on parallel or connecting streets are also shown in Table 7-3.

**Table 7-3: Sidewalk and Bike Lane Recommendations – Short, Medium, and Long Term**

		Short Term (0-5 years)	Mid-Term (6-10 years)	Long Term (11+ years)
Sidewalks	East Side	<ul style="list-style-type: none"><li>500-foot section from Rowan Street to Martin Luther King Jr. Freeway</li><li>300-foot section from Elm Street to Cain Road</li></ul>	<ul style="list-style-type: none"><li>700-foot section from Martin Luther King Jr. Freeway to Ames Street</li><li>900-foot section from Filter Plant Drive to Westmont Drive</li><li>1,000-foot section from Stamper Road to Elm Street</li><li>200-foot section from Cain Road to William Clark Road</li><li>1,800-foot section from William Clark Road to the E-Z Auto property</li><li>1,200-foot section from the northern edge of the Villagio property to Pamalee Drive</li></ul>	<ul style="list-style-type: none"><li>5,000-foot section from Westmont Drive to Stamper Road</li><li>2.5 miles from Pamalee Drive to I-295</li></ul>
	West Side	<ul style="list-style-type: none"><li>2,300-foot section from Skibo Road to Mullis Street</li></ul>	<ul style="list-style-type: none"><li>1,800-foot section from just north of Bethany Auto Sales to I-295</li></ul>	
Bike Lanes		<ul style="list-style-type: none"><li>Along Cain Road from Bragg Boulevard to Pamalee Drive</li><li>Along Pamalee Drive from Sycamore Dairy Road to Cain Road</li></ul>	<ul style="list-style-type: none"><li>Along Bragg Boulevard from Hay Street to Rowan Street and connecting to a proposed greenway from Veteran’s Park Phase 2 to FSU campus expansion</li><li>Along Rowan Street from Bragg Boulevard to Oak Ridge Avenue west to Fort Bragg Road</li><li>Along Ames Street from Rowan Street to a proposed greenway east of Bragg Boulevard</li><li>Along Fort Bragg Road from Oak Ridge Avenue to Bragg Boulevard</li><li>Along Stamper Road west to Fort Bragg Road and east to Cain Road</li></ul>	<ul style="list-style-type: none"><li>Along Bragg Boulevard from Cain Road to Pamalee Drive</li><li>Along Blanton Road extension from Pamalee Drive to Sycamore Dairy Road</li><li>Along Sycamore Dairy Road from Bragg Boulevard to Skibo Road</li></ul>

Note: All sidewalk lengths are approximate.

As noted in Chapter 4, additional pedestrian and bicycle amenities such as crosswalks, pedestrian signal heads, and bicycle racks would be needed to support the enhanced transit services and activity centers for the recommended concept. Studies such as a more detailed pedestrian and/or bicycle safety analysis could be carried out and can be combined with the information on resources, gaps and recommended actions from the Bragg Boulevard Corridor Plan. In particular, a feasibility study for the implementation of bicycle lanes between Skibo Road and Fort Bragg should be conducted following related safety improvements along this segment of the corridor in order to support a full bicycle connection between Fort Bragg and downtown Fayetteville. These additional studies may further refine the priorities and timeframes for the sidewalks and bicycle lane recommendations identified in this plan and are essential to provide detailed recommendations and priorities for crosswalk locations and types, pedestrian signal heads, bicycle racks and other features.

**Access Management Recommendations**

As described in Chapter 6, the Activity Center and Multimodal concept sets forth a vision for coordinated access management along the Bragg Boulevard corridor. This concept element focuses on facilitating efficient access to corridor resources by all modes of transportation, as well as on encouraging nodal and mixed-use development patterns that have the potential to reduce automobile dependency.

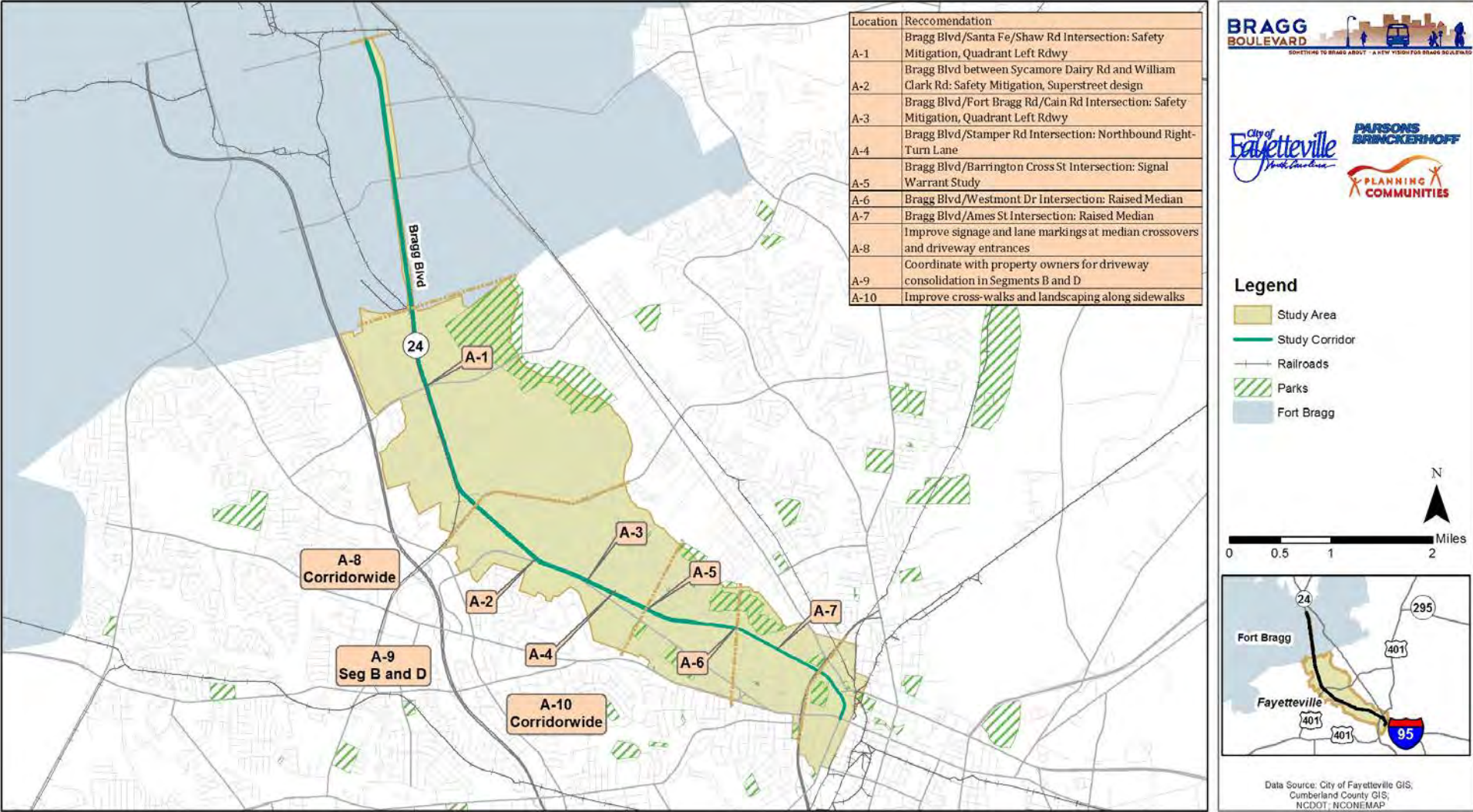
In an effort to achieve a balance between promoting transit-supportive development and moving traffic safely and efficiently, Table 7-4 below and Figure 7-3 summarize what is recommended along Bragg Boulevard from an access management perspective. The rationale behind the recommendations is also provided. In general, the access management recommendations are expected to improve safety for vehicles, bicyclists and pedestrians by reducing conflict points, shortening intersection widths, and reducing signal phases. As noted in the previous section, additional study is needed to develop more detailed recommendations for needed crosswalk improvements (A-10). In addition, the strategies discussed in the preceding section related to sidewalks and bike lanes are necessary to complement the access management recommendations and enhance the overall pedestrian and bicycling environment along the corridor.



**Table 7-4: Access Management Project Recommendations**

Project ID	Project Description	Rationale
	<b>Safety</b>	
A-1	Develop safety mitigations at the Santa Fe Drive/Shaw Road intersection, including consideration of a quadrant left intersection design	High crashes and high left-turn traffic
A-2	Develop safety mitigations at the Sycamore Dairy Road, Shannon Drive, and William Clark Road, including consideration of a superstreet concept	High crashes and high turning traffic, Skewed intersection
A-3	Develop safety mitigations at the Fort Bragg Road/Cain Road intersection, including consideration of a quadrant left intersection design using Sigman Street	High crashes and high turning traffic, Skewed intersection
	<b>Mobility/Access</b>	
A-4	Widen Bragg Boulevard to provide an exclusive northbound right-turn lane at the Stamper Road intersection with adequate deceleration length	High crashes and high turning traffic
A-5	Conduct signal warrant study at the Barrington Cross Street intersection and provide a new signal if needed; improve signage to define gateway to Fayetteville Technical Community College	High crashes
A-6	Provide raised concrete median (100-200 ft) along Bragg Boulevard for channelized left-turn movements into Westmont Drive (see Figure 7-4 for illustration)	High crashes
A-7	Provide raised concrete median (100-200 ft) along Bragg Boulevard for channelized left-turn movements into Ames Street (see Figure 7-4 for illustration)	High crashes
A-8	Improve traffic signage and lane markings for day- and night-time visual definition of median crossovers and driveway entrances (e.g., wayfinding signs, crossover signs, or intersection warning signs may be used in advance of a major driveway to indicate the possibility of turning or entering traffic)	High crashes
A-9	Coordinate with existing property owners for potential driveway consolidation in Segments B and D of the Bragg Boulevard study corridor	High crashes
A-10	Improve crosswalks at signalized intersections and provide landscaping along sidewalks to enhance pedestrian environment and support development patterns around transit bus stops and activity nodes throughout the Bragg Boulevard corridor	Promote alternate modes of travel

Figure 7-3: Access Management Recommendations



**Figure 7-4: Raised Concrete Median for Projects A-6 and A-7**



#### **Other Infrastructure and Policy Actions**

To complement strategies for land use, transit/transportation, and access management along the corridor, various other infrastructure projects and policy action items are recommended. These strategies support the overall vision of the Activity Center and Multimodal concept across the following major elements:

- Parks, open space, and greenways
- Aesthetics
- Public utilities



***Parks, Open Space, and Greenways***

As described in Chapter 6, the recommended concept for the Bragg Boulevard corridor includes proposed open space and greenway resources. These recommendations are made within the context of existing and planned parks and greenways within the study area, with an emphasis on connecting resources and creating an enhanced open space network. New parks could be implemented in the following locations: at the center of the Pilot Avenue activity center; along the eastern edge of the Villagio activity center; and east of the Bragg Boulevard corridor between Shaw Road and the southern boundary of Fort Bragg. Additionally, bikeway and greenway recommendations are made to connect these parks with existing recreational and open space resources in the surrounding area.

This vision can be supported through a variety of specific action items. If the Plan recommendations are adopted, the Fayetteville-Cumberland Parks & Recreation Master Plan should be updated to include the parks, greenways, and connecting bikeways recommended in the Bragg Boulevard Corridor Plan. As a related strategy, a study could be undertaken to evaluate how bikeways, greenways, and parks in the vicinity of Bragg Boulevard connect with similar resources in the larger region, and how this connectivity can best be supported as the parks and open space network continues to expand. Finally, to support implementation and funding for the recommendations made in this plan element, the City should establish a land banking fund and engage in parks/greenways bonding to address specific projects.

***Aesthetics***

Based on Steering Committee, stakeholder, and community input, a primary component of the Activity Center and Multimodal concept is aesthetics. Four of the eight corridor goals relate to aesthetics, an emphasis that is reflected in the recommended concept presented in Chapter 6.

Given the broad range of aesthetic issues identified by stakeholders, a first step in establishing priorities for aesthetic improvements would be to implement a survey of visual issues and preferences with corridor stakeholders, building on the outreach. While the City’s existing Façade Improvement Grant can help to address some aesthetic issues for existing developed properties, the following infrastructure projects and policy approaches can be undertaken to support corridor aesthetics:

- Develop and construct a gateway concept for the corridor, offering a unique identity and sense of place
- Enact site design guidelines and a signage ordinance to reflect this unique identity and regulate appearance standards along the corridor
- Create street design standards—including landscaping, pedestrian realm, frontage, and cross-section requirements—that enhance corridor aesthetics
- Identify and implement specific streetscape improvement and beautification projects
- Establish a utility burial fund to achieve underground utilities and enhanced streetscape aesthetics
- Issue streetscape improvement bonds for voter referendum that provide funds for public infrastructure projects

These action items will allow the City to set appearance standards and thus influence the visual character of the corridor and surrounding development.

### ***Public Utilities***

In addition to the multimodal transportation facilities recommended for the recommended concept, public utilities will be needed to serve new and intensified development along the corridor. These will include water and sewer expansions/extensions as well as public safety investments such as improved lighting.

To implement these recommended elements, the City should initiate a feasibility study of water, sewer, and other utilities needed to serve corridor development. Additionally, investments in improved lighting—including both roadway-oriented and pedestrian-scale—should be pursued to improve public safety. Following this study and based on its findings, the City should include appropriate infrastructure/facilities projects in its Capital Improvement Program.

### **Implementation Plan**

Figure 7-5 outlines a phased set of recommendations supporting the implementation of the recommended alternative concept. To provide practical timeframes for the proposed land use, transportation, infrastructure, and policy recommendations, a phasing strategy has been developed that divides the implementation action items into the following periods of time:

- Short-term – 0-5 years
- Mid-term – 6-10 years
- Long-term – 11+ years

Figure 7-5: Phased Recommendations Supporting the Recommended Concept

Corridor Goal	Phase I (0-5 years)	Phase II (6-10 years)	Phase III (11+ years)
Promote multimodal transportation choices	<ul style="list-style-type: none"> <li>Coordinate with FAST and Fort Bragg transit providers</li> <li>Begin Blue and Red Line Express with limited stops</li> <li>Explore new federal and local transit funding sources</li> <li>Include crosswalks and pedestrian signals within Capital Improvements Program funding and begin implementing in Activity Centers</li> <li>Revise City policy to allow funding for sidewalks on both sides of the street, and explore potential funding sources</li> <li>Continue funding landscaping improvements</li> <li>Complete installation of additional turn lanes and sidewalks from Pamalee Dr to Shaw Rd</li> <li>Establish funding for sidewalk gap program</li> <li>Fill sidewalk gaps from Rowan St to MLK Jr. Fwy, Elm St to Cain Rd, and Skibo Rd to Mullis St</li> <li>Install bike lanes/paths along Cain Rd</li> <li>Recommend updates to local transportation plans</li> <li>Begin initial phase of greenway development connecting Veterans Park to Mazarick Park</li> <li>Expand regional study of bike/ped connectivity in neighborhoods to include connectivity to parks and greenways; develop parks/greenways bond</li> <li>Conduct feasibility study for the implementation of bicycle lanes between Skibo Rd and Fort Bragg and develop recommendations for Phase II and III improvements</li> </ul>	<ul style="list-style-type: none"> <li>Increase Blue and Red Line Express bus service frequencies</li> <li>Construct bus stops, shelters, etc.</li> <li>Continue adding crosswalks and pedestrian signals within Activity Centers</li> <li>Conduct transit planning studies under Small Starts, Very Small Starts, or other funding programs when qualifying conditions are met</li> <li>Fill sidewalk gaps from MLK Jr. Fwy to Ames St, Filter Plant Dr to Westmont Dr, Stamper Rd to Elm St, Cain Rd to William Clark Rd, William Clark Rd to E-Z Auto, and Villagio to Pamalee Dr</li> <li>Prioritize and begin installing bike lanes/paths along identified segments of Bragg Blvd, and Rowan St, Ames St, Fort Bragg Rd, and Stamper Rd</li> <li>Develop designs to implement revised cross-sections, as needed, for each unique section from Hay St to future I-295 (including bike/ped facilities)</li> </ul>	<ul style="list-style-type: none"> <li>Increase Blue and Red Line Express and Cross-Town Routes frequencies</li> <li>Implement traffic signal pre-emption for buses</li> <li>Begin dedicated bus service (outside lane)</li> <li>Potentially pursue BRT</li> <li>Continue crosswalk and landscaping improvements</li> <li>Implement revised cross-sections from Hay St to future I-295, including construction or reconstruction of wider sidewalks, added lighting, curb extensions or on-street parking for specific activity centers</li> <li>Complete remainder of sidewalk gaps from MLK Jr. Fwy to Ames St, Filter Plant Dr to Westmont Dr, Stamper Rd to Elm St, Cain Rd to William Clark Rd, William Clark Rd to E-Z Auto, and Villagio to Pamalee Dr</li> <li>Fill sidewalk gaps from Westmont Dr to Stamper Rd, Pamalee Dr to I-295, and north of Bethany Auto Sales to I-295</li> <li>Complete installation of bike lanes/paths along identified segments of Bragg Blvd, Blanton Rd extension, and Sycamore Dairy Rd</li> </ul>
Improve mobility and access	<ul style="list-style-type: none"> <li>Conduct signal warrant study at Barrington Cross St and implement findings</li> <li>Provide raised concrete median (100-200 ft) along Bragg Blvd for channelized left-turn movements into Westmont Dr and Ames St</li> <li>Improve signage and lane markings for crossovers and driveways (e.g. wayfinding signs, crossover signs, intersection warning signs)</li> <li>Facilitate existing policy requiring shared driveways for properties targeted for site development or redevelopment</li> <li>Coordinate with existing property owners to plan for potential driveway consolidation in Segments B and D</li> <li>Complete installation of additional turn lanes and sidewalks from Pamalee Dr to Shaw Rd</li> <li>Implement planned Rowan St bridge redesign</li> <li>Recommend updates to transportation plans</li> </ul>	<ul style="list-style-type: none"> <li>Complete I-295 interchange and closure of public traffic to Fort Bragg via Bragg Blvd study</li> <li>Initiate feasibility studies on cross-sections from Hay St to future I-295 (including # of lanes and bike/ped facilities)</li> <li>Add northbound right-turn lane at Stamper Rd</li> <li>Develop safety mitigations at Santa Fe Dr/Shaw Rd where not in conflict with existing conservation lands (potential quadrant left design)</li> <li>Develop safety mitigations at Sycamore Dairy Rd, Shannon Dr and William Clark Rd (potential superstreet concept)</li> <li>Develop safety mitigations at Fort Bragg Rd/Cain Rd (potential quadrant left using Sigman St)</li> <li>Continue to improve signage and lane markings for crossovers and driveways (e.g. wayfinding signs, crossover signs, intersection warning signs)</li> <li>Develop designs to implement revised cross-sections, as needed, for each section from Hay St to future I-295 (including bike/ped facilities)</li> <li>Implement transit, pedestrian and bicycle improvements (see Multimodal Choices actions)</li> </ul>	<ul style="list-style-type: none"> <li>Implement revised cross-sections from Hay St to future I-295, including construction or reconstruction of wider sidewalks, added pedestrian lighting, curb extensions or on-street parking for specific activity centers</li> <li>Construct Blanton Rd Extension from Pamalee Dr to Bragg Blvd</li> <li>Continue implementing transit, pedestrian and bicycle improvements (see Multimodal Choices actions)</li> </ul>

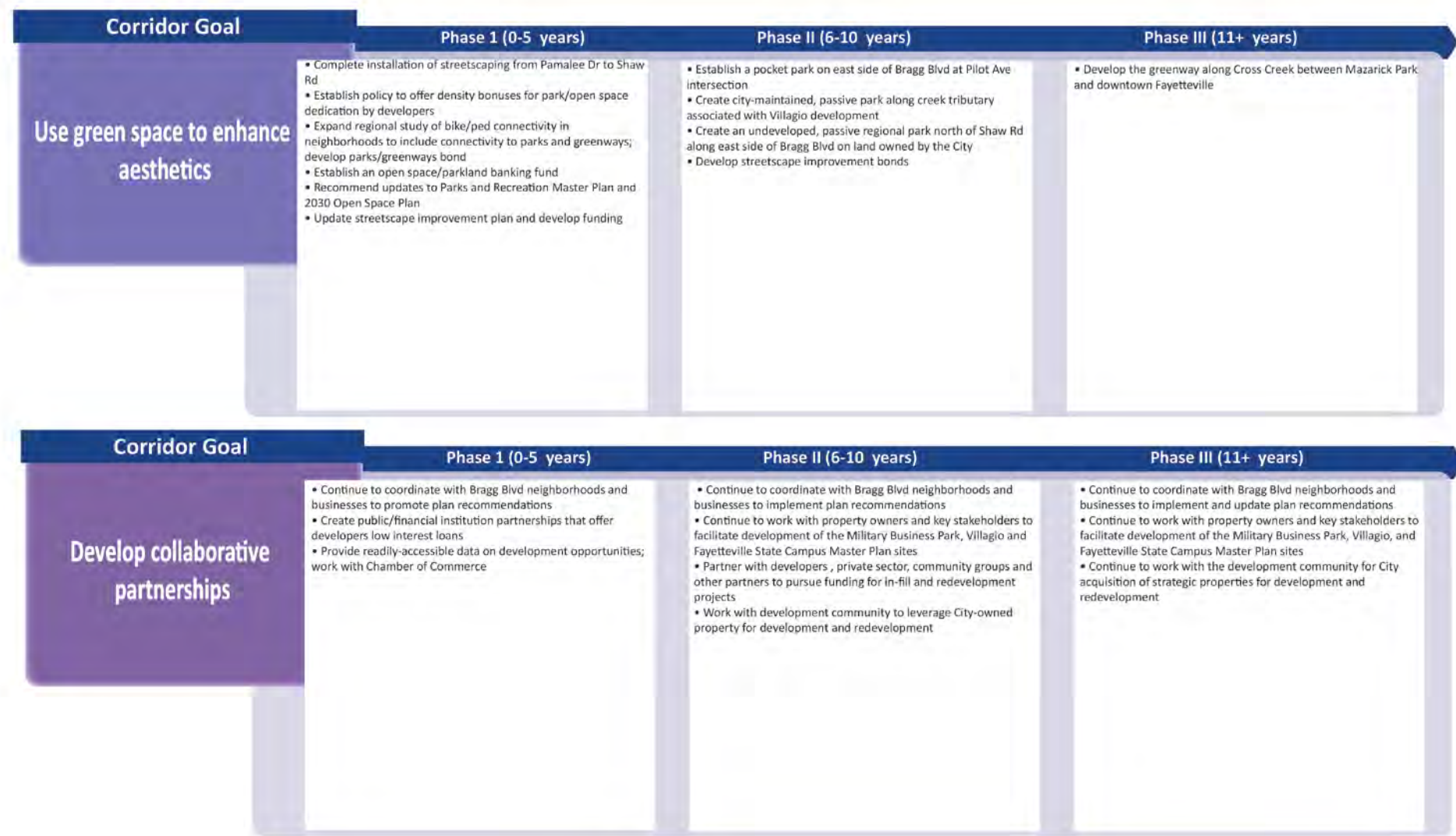


Corridor Goal	Phase I (0-5 years)	Phase II (6-10 years)	Phase III (11+ years)
Create vibrant, mixed-use places	<ul style="list-style-type: none"> <li>Adopt future land use plan and any zoning overlay districts (e.g. transit overlay district)</li> <li>Recommend other updates to land use and comprehensive growth plans</li> <li>Facilitate continued development of the Military Business Park, Villagio, Senior Center/Rec Club, Fayetteville State Campus Master Plan, and former Days Inn site</li> <li>Offer density bonuses for mixed-use development</li> <li>Waive various development approval fees and streamline the process to develop within strategic locations</li> <li>Provide readily-accessible data on development opportunities; work with Chamber of Commerce</li> <li>Initiate a feasibility study of water, sewer, and other utilities needed to serve corridor</li> </ul>	<ul style="list-style-type: none"> <li>Continue to facilitate development of the Military Business Park, Villagio, and Fayetteville State Campus Master Plan sites</li> <li>Utilize urban initiative funding sources that lend for higher-risk, in-fill projects (e.g. Blumberg Ventures)</li> <li>Secure New Markets Tax Credit funds or similar programs for redevelopment in low-income areas</li> <li>Leverage publicly-owned property to encourage private development; including strategic purchases that help assemble marketable sites</li> </ul>	<ul style="list-style-type: none"> <li>Continue to facilitate development of the Military Business Park, Villagio, and Fayetteville State Campus Master Plan sites</li> <li>Create tax increment financing districts for mixed-use development</li> <li>Continue to leverage publicly-owned property to encourage private development; including strategic purchases that help assemble marketable sites</li> <li>Acquire strategic properties and sell to developers (based on assessed rather than market value) via RFP process</li> </ul>

Corridor Goal	Phase I (0-5 years)	Phase II (6-10 years)	Phase III (11+ years)
Improve corridor safety and visual character	<ul style="list-style-type: none"> <li>Survey corridor property owners and residents on visual issues and preferences</li> <li>Complete installation of streetscaping from Pamalee Dr to Shaw Rd</li> <li>Invest in improved roadway and pedestrian lighting</li> <li>Begin funding bicycle, pedestrian, streetscape and landscaping improvements (see Multimodal actions)</li> <li>Develop/promote façade improvement grant program</li> <li>Establish a utility burial fund</li> <li>Complete utility line burial from Villagio property to Pamalee Dr</li> </ul>	<ul style="list-style-type: none"> <li>Develop the greenway along Cross Creek between Mazarick Park and downtown Fayetteville</li> <li>Develop safety mitigations at Santa Fe Dr/Shaw Rd (potential quadrant left intersection design); at Sycamore Dairy Rd, Shannon Dr, and William Clark Rd (potential superstreet concept); and at Fort Bragg Rd/Cain Rd (potential quadrant left using Sigman St)</li> <li>Develop designs for revised cross-sections, as needed, for each section from Hay St to future I-295 (including bike/ped facilities)</li> <li>Continue bike/ped, streetscape and landscaping improvements</li> <li>Develop streetscape improvement bonds</li> </ul>	<ul style="list-style-type: none"> <li>Develop the greenway along Cross Creek west of Mazarick Park</li> <li>Implement revised cross-sections from Hay St to future I-295, including construction or reconstruction of wider sidewalks, added pedestrian lighting, curb extensions or on-street parking for specific activity centers</li> <li>Continue implementing transit, pedestrian and bicycle improvements (see Multimodal Choices actions)</li> <li>Continue implementing landscaping improvements</li> </ul>

Corridor Goal	Phase I (0-5 years)	Phase II (6-10 years)	Phase III (11+ years)
Improve form and appearance of existing properties	<ul style="list-style-type: none"> <li>• Survey corridor property owners and residents on visual issues and preferences</li> <li>• Develop/promote façade improvement grant program</li> <li>• Develop enhanced site design standards</li> <li>• Implement tax rebates based on meeting certain performance measures including appearance</li> </ul>	<ul style="list-style-type: none"> <li>• Provide tax breaks to locate in existing vacant properties along the corridor</li> <li>• Pursue funding for in-fill and redevelopment projects (see Mixed Use actions)</li> </ul>	<ul style="list-style-type: none"> <li>• Create neighborhood improvement districts for improvement of public infrastructure within the corridor</li> </ul>

Corridor Goal	Phase I (0-5 years)	Phase II (6-10 years)	Phase III (11+ years)
Implement well-designed and well-planned signage	<ul style="list-style-type: none"> <li>• Survey property owners and residents on visual and signage issues and preferences (see above)</li> <li>• Develop and implement enhancements to the existing sign ordinance and site design guidelines/requirements within the UDO</li> <li>• Improve signage and lane markings for crossovers and driveways (e.g. wayfinding signs, crossover signs, intersection warning signs)</li> </ul>	<ul style="list-style-type: none"> <li>• Implement gateway construction/signage at Bragg Blvd and Martin Luther King Freeway and/or realigned Rowan St</li> <li>• Continue to improve signage and lane markings for crossovers and driveways (e.g. wayfinding signs, crossover signs, intersection warning signs)</li> </ul>	





Cost Estimates

To help prioritize improvements along the corridor, Table 7-5 indicates ranges of various capital and some operational costs for transportation improvements along Bragg Boulevard. Unit cost information is provided for key transportation elements to help in refining implementation priorities and timeframes. In addition, Table 7-6 provides more detailed cost estimates for specific access management recommendations. However, additional cost estimates should be prepared at the time of more detailed study for each of the elements.

Table 7-5: Estimated Transportation Unit and Operational Costs

Type of Improvement	Capital Cost	Operational Cost
Transit		
New Bragg Blvd limited stop route	\$150,000 per mile	\$65 per hour
BRT “lite” route (operates in curb lane)	\$450,000 per mile	\$65 per hour
Bus turnout at intersection	\$11,200 each	N/A
Bus turnout at mid-block	\$7,600 each	N/A
BRT in reserved right-of-way in median	\$10-\$15 million per mile	\$125 per hour
Access Management		
Raised median	\$15,000 to \$30,000 per 100 feet	N/A
Directional crossover	\$75,000	N/A
Median U-turn intersection	\$100,000 to construct and add signage or \$1 million to add signals, widen roadway, move utilities	N/A
Super street intersection	\$1.5 million	N/A
Quadrant left roadway	\$3 million per 1 mi to construct a typical three-lane urban street; \$300,000+ for signalization	N/A
Streetscaping		
Grassed buffer strip along roadway	\$8.00 per square foot	\$3,000 per year per mile
Underground utilities	\$350 per linear foot	N/A
Decorative lighting	\$125 per linear foot	N/A
Grassed median	\$8.00 per square foot	\$3,000 per year per mile
Street trees	\$400 per planted tree; 1 tree per 50 feet = \$42,400 per mile	\$4,000 per year per mile

Type of Improvement	Capital Cost	Operational Cost
Gateway	\$4,000 per simple monument; \$50,000 for signature element	\$500 per year
<b>Pedestrian/Bicycle Infrastructure</b>		
Sidewalks	\$25/linear foot for 5' wide concrete sidewalk, \$100-\$125/ linear foot for 10' wide asphalt multi-use path, \$800-\$1,500 per curb ramp, \$15 per foot for curb and gutter	\$1,000 per year per mile
Crosswalk marking	\$200/each - plain, \$400/each - zebra, \$3,000+/each – textured	N/A
Pedestrian signal head installation	\$20,000-\$40,000*	N/A
Bicycle lanes	\$5,000-\$50,000/mile**	\$1,000 per year per mile
Bicycle Racks	\$200-\$900/unit depending on size and style	N/A
Signs and posts	\$200/each	N/A
Asphalt multi-use path (10')	\$500,000 per mile	\$4,000 per year per mile

\*Costs vary depending on timing and complexity (assumes no signals currently exist at intersection)

\*\*Varies depending on pavement conditions, existing markings, signalization needs, etc.

**Sources:** FHWA, FTA, [www.citrusheights.net/docs/10.appendix\\_3.pdf](http://www.citrusheights.net/docs/10.appendix_3.pdf), [www.walkinginfo.org](http://www.walkinginfo.org), [www.bicyclinginfo.org](http://www.bicyclinginfo.org)

Table 7-6: Access Management Recommendations and Associated Cost Estimates

Project ID	Description	Capital Cost Range	Cost Assumption Notes
	<b>Safety</b>		
A-1	Develop safety mitigations at the Santa Fe Dr/Shaw Rd intersection, including consideration of a quadrant left intersection design	\$2.0 to \$3.0 million	a
A-2	Develop safety mitigations at the Sycamore Dairy Road, Shannon Drive, and William Clark Road, including consideration of a superstreet concept	\$ 1.5 to 2.0 million	b
A-3	Develop safety mitigations at the Fort Bragg Rd/Cain Rd intersection, including consideration of a quadrant left intersection design using Sigman St	\$1.0 to \$1.5 million	c
	<b>Mobility/Access</b>		
A-4	Widen Bragg Blvd to provide an exclusive northbound right-turn lane at the Stamper Rd intersection with adequate deceleration length	\$100,000	d
A-5	Conduct signal warrant study at the Barrington Cross St intersection and provide a new signal if needed; improve signage to define gateway to FTCC	\$300,000	e
A-6	Provide raised concrete median (100-200 ft) along Bragg Boulevard for channelized left-turn movements into Westmont Drive (see Figure 7-4 for illustration)	\$50,000	e
A-7	Provide raised concrete median (100-200 ft) along Bragg Boulevard for channelized left-turn movements into Ames Street (see Figure 7-4 for illustration)	\$50,000	e
A-8	Improve traffic signage and lane markings for day- and night-time visual definition of median crossovers and driveway entrances (e.g., wayfinding signs, crossover signs, or intersection warning signs may be used in advance of a major driveway to indicate the possibility of turning or entering traffic)	\$100,000	e
A-9	Coordinate with existing property owners for potential driveway consolidation in Segments B and D of the Bragg Blvd study corridor	N/A	N/A
A-10	Improve crosswalks at signalized intersections and provide landscaping along sidewalks to enhance pedestrian environment and support development patterns around transit bus stops and activity nodes throughout the Bragg Blvd corridor	\$0.5 to \$1.0 million	e

- a. Quadrant intersection cost assumes \$0.5 million construction costs for a new 0.2 mile long 3-lane quadrant roadway with sidewalks on both sides.
- b. Superstreet construction costs based on similar NCDOT TIP projects (U-5301 and U-5302).
- c. Cost assumes \$0.25 million construction costs for upgrading an existing roadway to a quadrant roadway with sidewalks on both sides.
- d. Cost could be higher if ROW and Utility relocation costs are involved.
- e. Engineer's order-of-magnitude estimate



### Financial Incentives

The proposed concept of activity centers and multimodal travel along Bragg Boulevard would require the creation of a new market niche that does not currently exist. The market within the corridor has previously responded with uses such as automobile sales and repair, adult entertainment, mini-storage facilities, and limited-service motels/hotels. Many of these uses are a reflection of the mobile nature of the population along the corridor, including Fort Bragg personnel.

Some market intervention in the form of public infrastructure improvements, financial incentives for developers, and changes in local development regulations/policies to shift the character of development along the corridor will be required. The long-term vision is that small changes that take place along the corridor due to the use of some of these tools will begin to improve the market potential for better-designed and higher intensity uses that can support enhanced transit service. Incrementally, these changes can lead to the creation of various destinations along the corridor that can be accessed by a more comprehensive transportation experience. The intervention actions to generate development momentum along the corridor can be in the form of public infrastructure projects, but short-term public incentives for development in currently underperforming areas are another useful tool to generate additional tax revenue in the long-term. This additional tax revenue can help other areas within the City of Fayetteville.

The following provides ideas for incentivizing development within the Bragg Boulevard corridor:

- Façade improvement grants
- Tax rebates based on meeting certain performance measures
- Tax increment financing districts
- Public/financial institution partnerships that offer developers low interest loans
- City acquisition of strategic properties/resale to developers (based on assessed value rather than market value)
- State tax credits for job creation
- New Markets Tax Credit - federal program that provides investors with a 39% federal tax credit payable over seven years. These investments are partnered with additional funds for businesses and real estate development in low income neighborhoods
- Neighborhood Improvement District (NID) - created in an area desiring certain public-use improvements that are paid for by special tax assessments to property owners in the area in which the improvements are made. Projects financed through an NID must be for facilities used by the public
- Density bonuses – higher-density residential permitted in exchange for affordable housing units or park/open space dedication
- Waiver of various development approval fees and streamlined process to develop within strategic locations along Bragg Boulevard based on plan recommendations
- Provision of readily-accessible information/data on development opportunities along the corridor; work with the Chamber of Commerce
- Tax breaks for business owners that locate in existing vacant properties along the corridor
- Discourage development in outlying areas that lack adequate public infrastructure

- Utilization of urban initiative funding sources that lend for higher-risk, in-fill development projects (i.e. Blumberg Ventures)
- Leveraging City-owned property to encourage private development; strategically purchasing land and making it easier for a developer to assemble a marketable site

In addition to improved land uses and a more efficient transportation network, one of the end results of implementing the recommendations within the Activity Center and Multimodal concept would be increased tax revenue for the City. By investing in some needed infrastructure projects and public-private partnerships along the Bragg Boulevard corridor in the near future, the City could experience increased revenue streams from more sustainable land uses in the long term.

**Conclusion**

With a clear vision in place, and a series of goals and related actions to achieve those goals, the Bragg Boulevard corridor is poised to continue its transition to a high-quality destination with multiple options for safe and efficient mobility. Recommendations have been provided in the plan to build upon the infrastructure that is currently in place in a phased strategy. The Plan focuses on those projects/initiatives that are either already underway or that have the highest potential to generate momentum for related activity. It will also be necessary to periodically update the Bragg Boulevard Corridor Plan recommendations as time progresses, taking into account any unanticipated changes in economic, political, or environmental conditions that could impact the pursuit of the identified goals.

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